计算机网络实验报告

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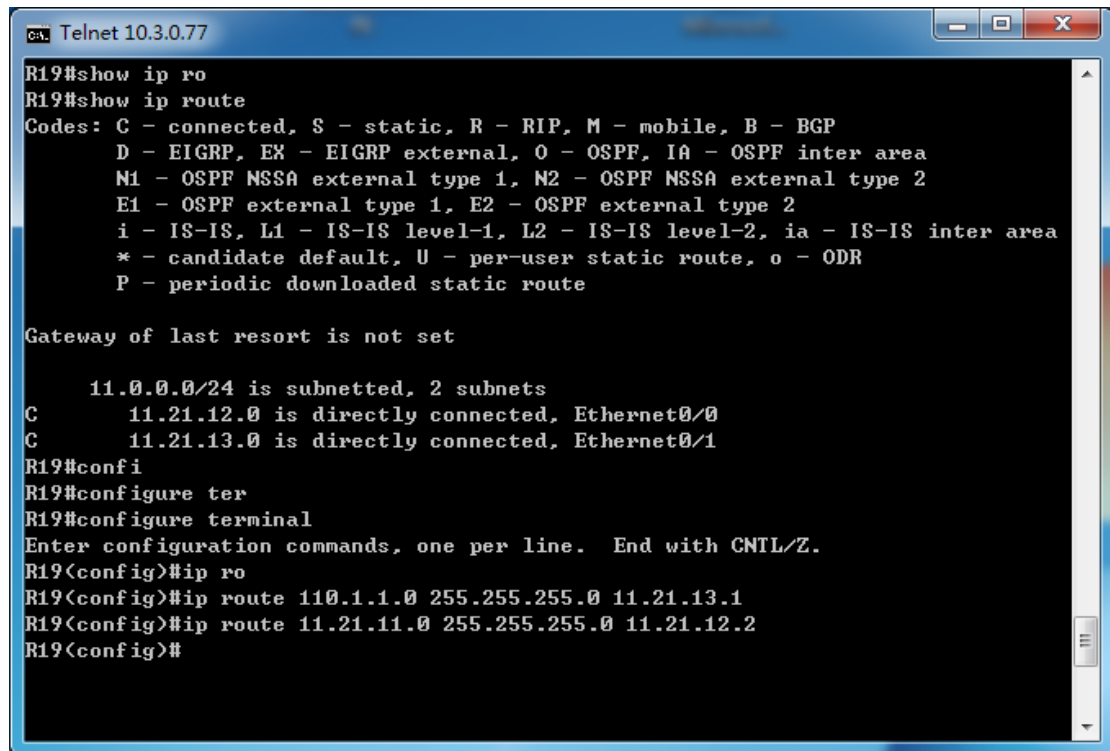实验分工：

钱威：配置第一个路由器的网段

黄彦：配置第二个路由器的网段

肖彦：配置第三个路由器的网段

协作完成三个路由器的路由表

实验截图：

```
Telnet 10.3.0.77

R19#show ip ro
R19#show ip route
Codes: C - connected, S - static, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2
       i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter area
       * - candidate default, U - per-user static route, o - ODR
       P - periodic downloaded static route

Gateway of last resort is not set

     11.0.0.0/24 is subnetted, 2 subnets
C       11.21.12.0 is directly connected, Ethernet0/0
C       11.21.13.0 is directly connected, Ethernet0/1
R19#confi
R19#configure ter
R19#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
R19(config)#ip ro
R19(config)#ip route 110.1.1.0 255.255.255.0 11.21.13.1
R19(config)#ip route 11.21.11.0 255.255.255.0 11.21.12.2
R19(config)#
```

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```
*Mar  1 01:45:57.766: %SYS-5-CONFIG_I: Configured from console by console
R19>show ip in br
Interface                  IP-Address      OK? Method Status                Prot
ocol
Ethernet0/0                11.21.12.1      YES manual up                     up

Serial0/0                  unassigned      YES NVRAM  administratively down down

Ethernet0/1                11.21.13.2      YES manual up                     up

Serial0/1                  unassigned      YES NVRAM  down                   down

Serial0/2                  unassigned      YES NVRAM  administratively down down

Virtual-Access1            unassigned      YES unset  up                     up


R19>
R19#show ip interface brief
```

```
Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 110.1.1.1, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 1/2/4 ms
Denver#show ip in br
Denver#show ip in brief
Interface                  IP-Address      OK? Method Status                Prot
ocol
Ethernet0/0                11.21.11.1      YES manual up                     up

Serial0/0                  unassigned      YES NVRAM  down                   down

Ethernet0/1                11.21.12.2      YES manual up                     up

Serial0/1                  unassigned      YES NVRAM  down                   down

Denver#show ip ro
Denver#show ip route
Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
       i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter area
       * - candidate default, U - per-user static route, o - ODR
       P - periodic downloaded static route
```

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```
Serial0/1                        unassigned      YES NURAM  down                        down

Denver#show ip ro
Denver#show ip route
Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
       i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter area
       * - candidate default, U - per-user static route, o - ODR
       P - periodic downloaded static route

Gateway of last resort is 11.21.12.1 to network 0.0.0.0

     11.0.0.0/24 is subnetted, 2 subnets
C       11.21.12.0 is directly connected, Ethernet0/1
C       11.21.11.0 is directly connected, Ethernet0/0
S*   0.0.0.0/0 [1/0] via 11.21.12.1
Denver#
```

```
Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 11.21.11.1, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 1/3/4 ms
R20#show ip in
R20#show ip interface br
R20#show ip interface brief
Interface                IP-Address      OK? Method Status                      Prot
ocol
Ethernet0/0              11.21.13.1      YES manual up                          up

Serial0/0                unassigned      YES NURAM  down                        down


Ethernet0/1              110.1.1.1       YES manual up                          up


Serial0/1                unassigned      YES NURAM  administratively down down


Serial0/2                unassigned      YES NURAM  administratively down down


R20#
  exit           Exit from the EXEC
```

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```
Serial0/1                    unassigned      YES NURAM  administratively down down

Serial0/2                    unassigned      YES NURAM  administratively down down

R20#show ip route
Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
       i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter area
       * - candidate default, U - per-user static route, o - ODR
       P - periodic downloaded static route

Gateway of last resort is 11.21.13.2 to network 0.0.0.0

     110.0.0.0/24 is subnetted, 1 subnets
C       110.1.1.0 is directly connected, Ethernet0/1
     11.0.0.0/24 is subnetted, 1 subnets
C       11.21.13.0 is directly connected, Ethernet0/0
S*   0.0.0.0/0 [1/0] via 11.21.13.2
R20#
  telnet           Open a telnet connection
```

```
Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 110.1.1.1, timeout is 2 seconds:
U.U.U
Success rate is 0 percent (0/5)
Denver#ping 110.1.1.1

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 110.1.1.1, timeout is 2 seconds:
U.U.U
Success rate is 0 percent (0/5)
Denver#ping 110.1.1.1

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 110.1.1.1, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 1/2/4 ms
Denver#show ip in br
Denver#show ip in brief
Interface                IP-Address      OK? Method Status                Prot
ocol
Ethernet0/0              11.21.11.1      YES manual up                    up

Serial0/0                unassigned      YES NURAM  down                  down

Ethernet0/1              11.21.12.2      YES manual up                    up
```

Ping

```
Telnet 10.3.0.77

S*    0.0.0.0/0 [1/0] via 11.21.13.0
R20#config ter
R20#config terminal
Enter configuration commands, one per line.  End with CNTL/Z.
R20(config)#no ip ro
R20(config)#no ip route 0.0.0.0 0.0
% Incomplete command.

R20(config)#no ip route 0.0.0.0 0.0.0.0 11.21.13.0
R20(config)#ip route 0.0.0.0 0.0.0.0 11.21.13.2
R20(config)#exit
R20#
01:34:49: %SYS-5-CONFIG_I: Configured from console by console
R20#ping 11.21.11.1

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 11.21.11.1, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 1/3/4 ms
R20#show ip in
R20#show ip interface br
R20#show ip interface brief
Interface                  IP-Address      OK? Method Status          Prot
ocol
Ethernet0/0                11.21.13.1      YES manual up              up
```