

Router0:(show ip route & show running):

Router#sh ip ro

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 not set

172.16.0.0/24 is subnetted, 1 subnets

C 172.16.0.0 is directly connected, FastEthernet5/0

172.17.0.0/16 is variably subnetted, 2 subnets, 2 masks

R 172.17.0.0/16 [120/2] via 172.16.0.2, 00:00:10, FastEthernet5/0

C 172.17.0.0/24 is directly connected, FastEthernet4/0

172.18.0.0/16 is variably subnetted, 2 subnets, 2 masks

R 172.18.0.0/16 [120/1] via 172.17.0.1, 00:00:11, FastEthernet4/0

R 172.18.0.0/24 [120/1] via 172.16.0.2, 00:00:10, FastEthernet5/0

C 192.168.1.0/24 is directly connected, FastEthernet0/0

R 192.168.2.0/24 [120/1] via 172.17.0.1, 00:00:11, FastEthernet4/0

R 192.168.3.0/24 [120/1] via 172.16.0.2, 00:00:10, FastEthernet5/0

Building configuration...

Current configuration : 1002 bytes

!

version 12.2

no service timestamps log datetime msec

no service timestamps debug datetime msec

no service password-encryption

!

hostname Router

!

!

!

!

ip dhcp excluded-address 192.168.1.1

!

ip dhcp pool 1.0

network 192.168.1.0 255.255.255.0

default-router 192.168.1.1

dns-server 8.8.8.8

!

!

!

ip cef

no ipv6 cef

!

```
!
!  
!  
!  
!  
!  
!  
!  
!  
!  
!  
!  
!  
!  
!  
!  
  
interface FastEthernet0/0  
ip address 192.168.1.1 255.255.255.0  
duplex auto  
speed auto  
!  
interface FastEthernet1/0  
no ip address  
duplex auto  
speed auto  
shutdown  
!  
interface Serial2/0  
no ip address  
clock rate 2000000  
shutdown  
!  
interface Serial3/0  
no ip address  
clock rate 2000000  
shutdown  
!  
interface FastEthernet4/0  
ip address 172.17.0.2 255.255.255.0  
!  
interface FastEthernet5/0  
ip address 172.16.0.1 255.255.255.0  
!  
router rip  
version 2  
network 172.16.0.0  
network 172.17.0.0  
network 192.168.1.0  
no auto-summary  
!  
ip classless
```

```

!
ip flow-export version 9
!
!
!
!
!
!
!
!
!
line con 0
!
line aux 0
!
line vty 0 4
login
!
!
!
end

```

Router1:(show ip route & show running):

Router#sh ip ro

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 not set

```

172.16.0.0/24 is subnetted, 1 subnets
R 172.16.0.0 [120/1] via 172.17.0.2, 00:00:03, FastEthernet4/0
[120/1] via 172.18.0.1, 00:00:11, FastEthernet5/0
172.17.0.0/16 is variably subnetted, 2 subnets, 2 masks
C 172.17.0.0/16 is directly connected, FastEthernet4/0
R 172.17.0.0/24 [120/2] via 172.18.0.1, 00:00:11, FastEthernet5/0
172.18.0.0/16 is variably subnetted, 2 subnets, 2 masks
C 172.18.0.0/16 is directly connected, FastEthernet5/0
R 172.18.0.0/24 [120/2] via 172.17.0.2, 00:00:03, FastEthernet4/0
R 192.168.1.0/24 [120/1] via 172.17.0.2, 00:00:03, FastEthernet4/0
C 192.168.2.0/24 is directly connected, FastEthernet0/0
R 192.168.3.0/24 [120/1] via 172.18.0.1, 00:00:11, FastEthernet5/0

```

Router#sh ru

Building configuration...

Current configuration : 970 bytes

!

```

version 12.2
no service timestamps log datetime msec
no service timestamps debug datetime msec
no service password-encryption
!
hostname Router
!
!
!
!
ip dhcp excluded-address 192.168.2.1
!
ip dhcp pool 2.0
network 192.168.2.0 255.255.255.0
dns-server 8.8.8.8
!
!
!
ip cef
no ipv6 cef
!
!
!
!
!
!
!
!
!
!
!
!
!
!
!
!
!
!
interface FastEthernet0/0
ip address 192.168.2.1 255.255.255.0
duplex auto
speed auto
!
interface FastEthernet1/0
no ip address
duplex auto
speed auto
shutdown
!
interface Serial2/0
no ip address
clock rate 2000000

```

```

shutdown
!
interface Serial3/0
no ip address
clock rate 2000000
shutdown
!
interface FastEthernet4/0
ip address 172.17.0.1 255.255.0.0
!
interface FastEthernet5/0
ip address 172.18.0.2 255.255.0.0
!
router rip
version 2
network 172.17.0.0
network 172.18.0.0
network 192.168.2.0
no auto-summary
!
ip classless
!
ip flow-export version 9
!
!
!
!
!
!
!
!
!
!
line con 0
!
line aux 0
!
line vty 0 4
login
!
!
!
end

```

Router2:(show ip route & show running):

```

Router#sh ip ro
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 not set

172.16.0.0/24 is subnetted, 1 subnets
C 172.16.0.0 is directly connected, FastEthernet5/0
172.17.0.0/16 is variably subnetted, 2 subnets, 2 masks
R 172.17.0.0/16 [120/1] via 172.18.0.2, 00:00:15, FastEthernet4/0
R 172.17.0.0/24 [120/1] via 172.16.0.1, 00:00:11, FastEthernet5/0
172.18.0.0/16 is variably subnetted, 2 subnets, 2 masks
R 172.18.0.0/16 [120/2] via 172.16.0.1, 00:00:11, FastEthernet5/0
C 172.18.0.0/24 is directly connected, FastEthernet4/0
R 192.168.1.0/24 [120/1] via 172.16.0.1, 00:00:11, FastEthernet5/0
R 192.168.2.0/24 [120/1] via 172.18.0.2, 00:00:15, FastEthernet4/0
C 192.168.3.0/24 is directly connected, FastEthernet0/0

Router#sh ru
Building configuration...

Current configuration : 974 bytes

```
!  
version 12.2  
no service timestamps log datetime msec  
no service timestamps debug datetime msec  
no service password-encryption  
!  
hostname Router  
!  
!  
!  
!  
ip dhcp excluded-address 192.168.3.1  
!  
ip dhcp pool 3.0  
network 192.168.3.0 255.255.255.0  
dns-server 8.8.8.8  
!  
!  
!  
ip cef  
no ipv6 cef  
!  
!  
!  
!  
!  
!  
!  
!  
!  
!
```

```
!  
!  
!  
!  
!  
!  
interface FastEthernet0/0  
ip address 192.168.3.1 255.255.255.0  
duplex auto  
speed auto  
!  
interface FastEthernet1/0  
no ip address  
duplex auto  
speed auto  
shutdown  
!  
interface Serial2/0  
no ip address  
clock rate 2000000  
shutdown  
!  
interface Serial3/0  
no ip address  
clock rate 2000000  
shutdown  
!  
interface FastEthernet4/0  
ip address 172.18.0.1 255.255.255.0  
!  
interface FastEthernet5/0  
ip address 172.16.0.2 255.255.255.0  
!  
router rip  
version 2  
network 172.16.0.0  
network 172.18.0.0  
network 192.168.3.0  
no auto-summary  
!  
ip classless  
!  
ip flow-export version 9  
!  
!  
!  
!  
!  
!  
!  
!  
line con 0
```

```
!  
line aux 0  
!  
line vty 0 4  
login  
!  
!  
!  
end
```