

- **Configuration Codes**

**Naboo :**

Router#conf

Configuring from terminal, memory, or network [terminal]?

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#ip route 172.20.0.0 255.254.0.0 Se0/1/0

%Default route without gateway, if not a point-to-point interface, may impact performance

Router(config)#

Router(config)#ip route 10.0.0.0 255.0.0.0 Se0/1/0

%Default route without gateway, if not a point-to-point interface, may impact performance

Router(config)#

Router(config)#ip route 192.0.16.0 255.255.248.0 Se0/1/0

%Default route without gateway, if not a point-to-point interface, may impact performance

Router(config)#ip route 192.168.0.0 255.255.240.0 Se0/1/0

Router(config)#ip route 172.16.0.0 255.255.0.0 Se0/1/0

Router(config)#ip route 192.168.0.0 255.255.240.0 Se0/0/0 10

Router(config)#ip route 172.16.0.0 255.255.0.0 Se0/0/0 10

Router(config)#

Router(config)#^Z

**Endor :**

Router>en

Router#

Router#

Router#show ip route

Codes: L - local, 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, 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

S 172.16.0.0/16 is directly connected, Serial0/1/1

S 192.0.0.0/20 is directly connected, Serial0/1/0

192.0.35.0/24 is variably subnetted, 2 subnets, 2 masks

C 192.0.35.4/30 is directly connected, Serial0/1/1

L 192.0.35.5/32 is directly connected, Serial0/1/1

192.0.36.0/24 is variably subnetted, 2 subnets, 2 masks

C 192.0.36.0/30 is directly connected, Serial0/1/0

L 192.0.36.2/32 is directly connected, Serial0/1/0

C 192.168.0.0/16 is directly connected, GigabitEthernet0/0

192.168.0.0/32 is subnetted, 1 subnets

L 192.168.0.3/32 is directly connected, GigabitEthernet0/

Router(config)#ip route 192.0.0.0 255.255.240.0 Se0/1/0

Router(config)#ip route 172.16.0.0 255.255.0.0 Se0/1/1

```
Router(config)#ip route 172.16.0.0 255.255.0.0 Se0/0/0 10
```

### **Dagobath :**

```
Router#
```

```
%SYS-5-CONFIG_I: Configured from console by console
```

```
Router#show ip route
```

Codes: L - local, 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, 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

S 10.0.0.0/8 is directly connected, Serial0/0/0

172.16.0.0/16 is variably subnetted, 2 subnets, 2 masks

C 172.16.0.0/16 is directly connected, GigabitEthernet0/0

L 172.16.0.1/32 is directly connected, GigabitEthernet0/0

R 172.20.0.0/14 [120/1] via 192.0.36.18, 00:00:25, Serial0/0/0

S 192.0.0.0/20 is directly connected, Serial0/1/0

S 192.0.16.0/21 is directly connected, Serial0/0/0

192.0.36.0/24 is variably subnetted, 6 subnets, 2 masks

C 192.0.36.4/30 is directly connected, Serial0/1/0

L        192.0.36.6/32 is directly connected, Serial0/1/0  
R        192.0.36.8/30 [120/1] via 192.0.36.18, 00:00:25, Serial0/0/0  
R        192.0.36.12/30 [120/2] via 192.0.36.18, 00:00:25, Serial0/0/0

Router#

Router#configure terminal

Enter configuration commands, one per line.    End with CNTL/Z.

Router(config)#

Router(config)#ip route 172.20.0.0 255.254.0.0 Se0/0/0

%Default route without gateway, if not a point-to-point interface, may impact performance

Router(config)#

Router(config)#

Router(config)#

Router(config)#^Z

Router#

%SYS-5-CONFIG\_I: Configured from console by console

Router#show ip route

Codes: L - local, 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, 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

```
S    10.0.0.0/8 is directly connected, Serial0/0/0
      172.16.0.0/16 is variably subnetted, 2 subnets, 2 masks
C      172.16.0.0/16 is directly connected, GigabitEthernet0/0
L      172.16.0.1/32 is directly connected, GigabitEthernet0/0
R      172.20.0.0/14 [120/1] via 192.0.36.18, 00:00:10, Serial0/0/0
S      172.20.0.0/15 is directly connected, Serial0/0/0
S      192.0.0.0/20 is directly connected, Serial0/1/0
S      192.0.16.0/21 is directly connected, Serial0/0/0
      192.0.36.0/24 is variably subnetted, 6 subnets, 2 masks
C      192.0.36.4/30 is directly connected, Serial0/1/0
L      192.0.36.6/32 is directly connected, Serial0/1/0
R      192.0.36.8/30 [120/1] via 192.0.36.18, 00:00:10, Serial0/0/0
R      192.0.36.12/30 [120/2] via 192.0.36.18, 00:00:10, Serial0/0/0
C      192.0.36.16/30 is directly connected, Serial0/0/0
L      192.0.36.17/32 is directly connected, Serial0/0/0
S      192.168.0.0/16 is directly connected, Serial0/1/0
```

```
Router(config)#ip route 192.0.0.0 255.255.240.0 Se0/1/0
```

```
Router(config)#ip route 192.168.0.0 255.255.0.0 Se0/1/0
```

```
Router(config)#ip route 192.0.0.0 255.255.240.0 Se0/0/1 10
```

## **Hoth :**

outer#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#router rip

Router(config)#ip route 0.0.0.0 0.0.0.0 Se0/0/0

Router(config-router)#^Z

Router#

%SYS-5-CONFIG\_I: Configured from console by console

Router#show ip route rip

R 10.0.0.0/8 [120/1] via 192.0.36.10, 00:00:08, Serial0/1/0

172.21.0.0/32 is subnetted, 1 subnets

R 192.0.0.0/20 [120/1] via 192.0.36.17, 00:00:25, Serial0/0/0

R 192.0.16.0/21 [120/2] via 192.0.36.10, 00:00:08, Serial0/1/0

192.0.36.0/24 is variably subnetted, 6 subnets, 2 masks

R 192.0.36.4/30 [120/1] via 192.0.36.17, 00:00:25, Serial0/0/0

R 192.0.36.12/30 [120/1] via 192.0.36.10, 00:00:08, Serial0/1/0

R 192.168.0.0/16 [120/1] via 192.0.36.17, 00:00:25, Serial0/0/0

Router#conf

Configuring from terminal, memory, or network [terminal]?

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#router rip

Router(config-router)#version 2

```
Router(config-router)#no aut
```

```
Router(config-router)#no auto-summary
```

```
Router(config-router)#network 192.0.36.16
```

```
Router(config-router)#network 192.0.36.28
```

```
Router(config-router)#network 192.0.36.8
```

```
Router(config-router)#network 172.20.0.0
```

```
Router(config-router)#do wr
```

```
Building configuration...
```

```
[OK]
```

```
Router(config-router)#^Z
```

```
Router#
```

```
%SYS-5-CONFIG_I: Configured from console by console
```

```
Router#show ip route rip
```

```
R    10.0.0.0/8 [120/1] via 192.0.36.10, 00:00:20, Serial0/1/0
```

```
    172.21.0.0/32 is subnetted, 1 subnets
```

```
R    192.0.0.0/20 [120/1] via 192.0.36.17, 00:00:08, Serial0/0/0
```

```
R    192.0.16.0/21 [120/2] via 192.0.36.10, 00:00:20, Serial0/1/0
```

```
    192.0.36.0/24 is variably subnetted, 6 subnets, 2 masks
```

```
R        192.0.36.4/30 [120/1] via 192.0.36.17, 00:00:08, Serial0/0/0
```

```
R        192.0.36.12/30 [120/1] via 192.0.36.10, 00:00:20, Serial0/1/0
```

```
R    192.168.0.0/16 [120/1] via 192.0.36.17, 00:00:08, Serial0/0/0
```

```
Router#
```

```
Router#
```

Ruter con0 is now available

Press RETURN to get started

Router>

Router>en

Router#show ip route rip

R 10.0.0.0/8 [120/1] via 192.0.36.10, 00:00:03, Serial0/1/0

172.21.0.0/32 is subnetted, 1 subnets

R 192.0.0.0/20 [120/1] via 192.0.36.17, 00:00:16, Serial0/0/0

R 192.0.16.0/21 [120/2] via 192.0.36.10, 00:00:03, Serial0/1/0

192.0.36.0/24 is variably subnetted, 6 subnets, 2 masks

R 192.0.36.4/30 [120/1] via 192.0.36.17, 00:00:16, Serial0/0/0

R 192.0.36.12/30 [120/1] via 192.0.36.10, 00:00:03, Serial0/1/0

R 192.168.0.0/16 [120/1] via 192.0.36.17, 00:00:16, Serial0/0/0

Router#

Router#

Router#conf

Configuring from terminal, memory, or network [terminal]?

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#router rip

Router(config-router)#

Router(config-router)#end

Router#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.



```
Router(config)#interface Serial0/0/0
```

```
Router(config-if)#
```

```
%SYS-5-CONFIG_I: Configured from console by console
```

```
Router(config-if)#
```

```
Router(config-if)#^Z
```

```
Router#
```

```
%SYS-5-CONFIG_I: Configured from console by console
```

```
Router#
```

```
Router#
```

```
Router#configure terminal
```

```
Enter configuration commands, one per line.  End with CNTL/Z.
```

```
Router(config)#
```

```
Router(config)#ip route 0.0.0.0 0.0.0.0 Se0/0/0
```

```
%Default route without gateway, if not a point-to-point interface, may impact performance
```

```
Router(config)#
```

```
Router(config)#^Z
```

```
Router#
```

```
%SYS-5-CONFIG_I: Configured from console by console
```

```
Router#configure terminal
```

```
Enter configuration commands, one per line.  End with CNTL/Z.
```

```
Router(config)#interface GigabitEthernet0/0
```

```
Router(config-if)#ip address 172.21.0.1 255.254.0.0
```

Router(config-if)

Router con0 is now available

Press RETURN to get started

Router>enable

Router#

Router#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#router rip

Router(config-router)#

Router(config-router)#end

Router#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#

Router(config)#

%SYS-5-CONFIG\_I: Configured from console by console

%LINK-3-UPDOWN: Interface Serial0/1/0, changed state to down

%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial0/1/0, changed state to down

%LINK-5-CHANGED: Interface Serial0/1/0, changed state to up

## **Bespin :**

Router(config-if)#ip address 10.0.0.1 255.0.0.0

Router(config-if)#ip address 10.0.0.1 255.0.0.0

Router(config-if)#no shutdown

Router(config-if)#

%LINK-5-CHANGED: Interface GigabitEthernet0/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0, changed state to up

ip address 10.0.0.1 255.0.0.0

Router(config-if)#ip address 10.0.0.1 255.0.0.0

Router(config-if)#

Router(config-if)#exit

Router(config)#interface Serial0/1/0

Router(config-if)#

Router(config-if)#exit

Router(config)#interface Serial0/1/1

Router(config-if)#no shutdown

Router(config-if)#ip address 192.0.36.13 255.255.255.252

Router(config-if)#ip address 192.0.36.13 255.255.255.252

Router(config-if)#clock rate 64000

Router(config-if)#exit

Router(config)#ip route 0.0.0.0 0.0.0.0 Se0/1/1

%LINK-5-CHANGED: Interface Serial0/1/1, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial0/1/1, changed state to up

Router(config-if)#

Router(config-if)#^Z

Router#

%SYS-5-CONFIG\_I: Configured from console by console

Router#conf

Configuring from terminal, memory, or network [terminal]?

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#router rip

Router(config-router)#version 2

Router(config-router)#no au

Router(config-router)#no auto-summary

Router(config-router)#network 192.0.36.8

Router(config-router)#network 192.0.36.12

Router(config-router)#network 10.0.0.0

Router(config-router)#do wr

Building configuration...

[OK]

Router(config-router)#^Z

Router#

%SYS-5-CONFIG\_I: Configured from console by console

## **Tatooine :**

Router>enable

Router#

Router#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#interface Serial0/1/0

Router(config-if)#no shutdown

Router(config-if)#

%LINK-5-CHANGED: Interface Serial0/1/0, changed state to up

ip address 192.0.36.14 255.255.255.0

Router(config-if)#

%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial0/1/0, changed state to up

ip address 192.0.36.14 255.255.255.252

Router(config-if)#

Router(config-if)#exit

Router(config)#interface GigabitEthernet0/0

Router(config-if)#no shutdown

Router(config-if)#

%LINK-5-CHANGED: Interface GigabitEthernet0/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0, changed state to up

ip address 192.0.16.1 255.255.255.0

Router(config-if)#ip address 192.0.16.1 255.255.255.0

Router(config-if)#ip address 192.0.16.1 255.255.248.0

Router(config-if)#

Router(config-if)#

Router(config-if)#^Z

Router#

%SYS-5-CONFIG\_I: Configured from console by console

Router#

Router#conf

Configuring from terminal, memory, or network [terminal]?

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#router rip

Router(config)#ip route 0.0.0.0 0.0.0.0 Se0/1/0

Router(config-router)#version 2

Router(config-router)#no au

Router(config-router)#no auto-summary

Router(config-router)#network 192.0.16.0

Router(config-router)#network 192.0.36.12

Router(config-router)#network 192.0.36.28

Router(config-router)#do wr

Building configuration...

[OK]

Router(config-router)#^Z

Router#

%SYS-5-CONFIG\_I: Configured from console by console

Router#

Router#

Router con0 is now available

Press RETURN to get started

Router>enable

Router#

Router#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#interface GigabitEthernet0/0

Router(config-if)#

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0, changed state to down

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0, changed state to up

Router(config-if)#exit

Router(config)#interface GigabitEthernet0/0

Router(config-if)#ip address 192.0.16.1 255.255.248.0

Router(config-if)#

Router con0 is now available

Press RETURN to get started.

Router>enable

Router#

Router#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#interface GigabitEthernet0/0

Router(config-if)#ip address 192.0.16.1 255.255.248.0

Router(config-if)#exit

Router(config)#ip route 0.0.0.0 0.0.0.0 Se0/1/0

%Default route without gateway, if not a point-to-point interface, may impact performance

Router(config)#

Router(config)#

Router(config)#do wr

Building configuration...

[OK]

Router(config)#

Router(config)#^Z

Router#

%SYS-5-CONFIG\_I: Configured from console by conso

- **IP TABLE**



Device	Interface	IPV4	Subnet Mask	Default Gateway
Naboo (Router)	Gig 0/0	192.0.0.1	255.255.240.0	-
	Se 0/0/0	192.0.36.22	255.255.255.252	-
	Se 0/1/0	192.0.36.1	255.255.255.252	-
Endor (Router)	Gig 0/0	192.168.0.3	255.255.0.0	-
	Se 0/1/0	192.0.36.2	255.255.255.252	-
	Se 0/1/1	192.0.35.5	255.255.255.252	-
Dagobath (Router)	Gig 0/0	172.16.0.1	255.255.0.0	-
	Se 0/0/0	192.0.36.17	255.255.255.252	-
	Se 0/0/1	192.0.36.21	255.255.255.252	-
	Se 0/1/0	192.0.36.6	255.255.255.252	-
Hoth (Router)	Gig 0/0	172.21.0.1	255.254.0.0	-
	Se 0/0/0	192.0.36.18	255.255.255.252	-
	Se 0/0/1	192.168.0.29	255.255.255.252	-
	Se 0/1/0	192.0.36.9	255.255.255.252	-
Bespin (Router)	Gig 0/0	10.0.0.1	255.0.0.0	-
	Se 0/1/0	192.0.36.10	255.255.255.252	-
	Se 0/1/1	192.0.36.13	255.255.255.252	-

Tattooine (Router)	Gig 0/0	192.0.16.1	255.255.248.0	-
	Se 0/0/0	192.0.36.30	255.255.255.252	-
	Se 0/1/0	192.0.36.14	255.255.255.252	-
PC0		192.0.0.2	255.255.240.0	192.0.0.1
Email (Server)		192.0.0.5	255.255.240.1	192.0.0.2
DHCP (Server)		192.168.0.1	255.255.0.0	192.168.0.3
PC1		192.168.0.2	255.255.0.0	192.168.0.3
DNS (Server)		192.168.0.5	255.255.0.0	192.168.0.3
Printer0		DHCP Assigned	-	192.168.0.3
DHCP2 (server)		172.16.0.6	255.240.0.0	172.16.0.1
PC1		172.16.0.2	255.240.0.0	172.16.0.1
Laptop0		172.16.0.4	255.240.0.0	172.16.0.1
PC3		172.21.0.2	255.254.0.0	172.21.0.1
Laptop1		172.21.0.6	255.254.0.0	172.21.0.1

DHCP3		172.21.0.8	255.254.0.0	172.21.0.1
PC4		10.0.0.2	255.0.0.0	10.0.0.1
Printer1		DHCP Assigned	-	10.0.0.1
DHCP4		10.0.0.3	255.0.0.0	10.0.0.1
PC5		192.0.16.2	255.255.248.0	192.0.16.1
PC6		192.0.16.6	255.255.248.0	192.0.16.1

- **VLSM :**





