



1.configure RIP (Routing Information Protocol)

Router1 (left-most)

Hostname: Router5

```
enable
configure terminal
router rip
version 2
no auto-summary
network 192.168.1.0
network 192.168.4.0
end
```

Router2 (middle)

Hostname: Router6

```
enable
configure terminal
router rip
version 2
no auto-summary
network 192.168.2.0
network 192.168.4.0
network 192.168.5.0
end
```

Router3 (right-most)

Hostname: Router7

```
enable
configure terminal
router rip
version 2
no auto-summary
network 192.168.3.0
network 192.168.5.0
end
```

Verify RIP Routing

On any router, use:

```
show ip route
```

And to see the RIP updates:

```
debug ip rip
```

2. configure static routing

Network Summary

- **Router5 (left):**
 - Connected to: 192.168.1.0, 192.168.4.0
 - **Router6 (middle):**
 - Connected to: 192.168.2.0, 192.168.4.0, 192.168.5.0
 - **Router7 (right):**
 - Connected to: 192.168.3.0, 192.168.5.0
-

Router5 (Router name: Router5)

```
enable
configure terminal
ip route 192.168.2.0 255.255.255.0 192.168.4.2
ip route 192.168.3.0 255.255.255.0 192.168.4.2
end
```

Router6 (Router name: Router6)

```
enable
configure terminal
ip route 192.168.1.0 255.255.255.0 192.168.4.1
ip route 192.168.3.0 255.255.255.0 192.168.5.2
end
```

Router7 (Router name: Router7)

```
enable
configure terminal
ip route 192.168.1.0 255.255.255.0 192.168.5.1
ip route 192.168.2.0 255.255.255.0 192.168.5.1
end
```

How It Works

- Each router is told where to send traffic that is not part of its directly connected networks.
- Use `ping` from one PC to another (like from `PC0` to `PC2`) to test end-to-end connectivity.
- You can verify static routes using:

```
show ip route
```