RIP & EIGRP Dynamic Routing
Modul 13

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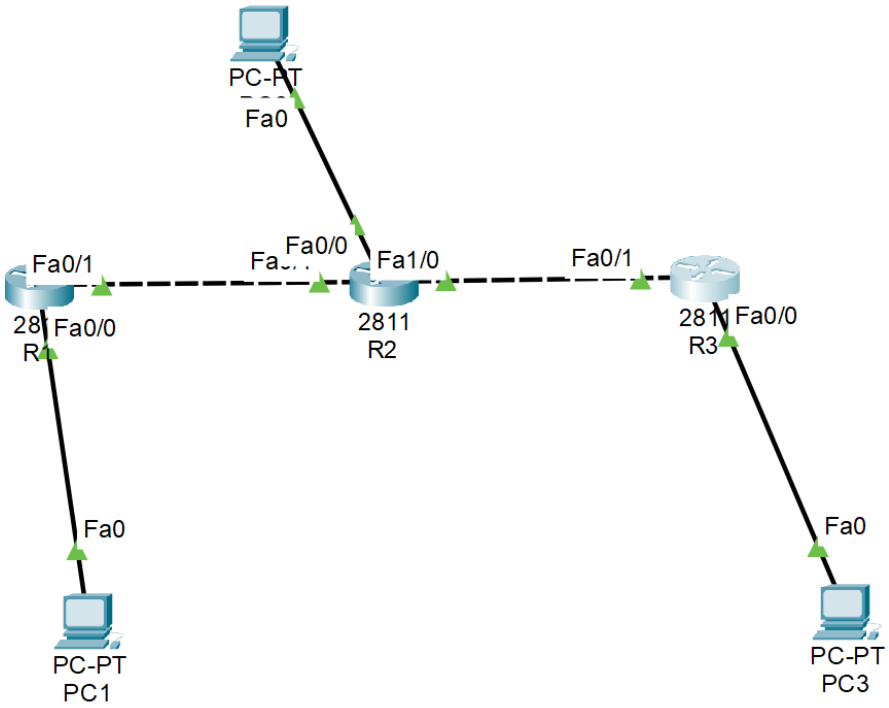
- **Konfigurasi RIP**



1. Buat topologi seperti yang ditunjukkan pada gambar di atas
2. Buatlah IP Address di PC

No	Nama Device	Alamat	Netmask	Gateway
1	PC1	192.168.1.10	255.255.255.0	192.168.1.1
2	PC2	192.168.2.10	255.255.255.0	192.168.2.1
3	PC3	192.168.3.10	255.255.255.0	192.168.3.1

3. Setelah selesai menambahkan konfigurasi IP Address di PC, selanjutnya melakukan konfigurasi RIP pada Router, sebagai berikut:

- Konfigurasi R1

```
R1_09010182327008>enable
R1_09010182327008#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
R1_09010182327008(config)#int fa0/0
R1_09010182327008(config-if)#ip address 192.168.1.1 255.255.255.0
R1_09010182327008(config-if)#no sh
R1_09010182327008(config-if)#exit
R1_09010182327008(config)#int fa0/1
R1_09010182327008(config-if)#ip address 192.168.100.1 255.255.255.252
R1_09010182327008(config-if)#no sh
R1_09010182327008(config-if)#ex
R1_09010182327008(config)#router rip
R1_09010182327008(config-router)#version 2
R1_09010182327008(config-router)#network 2
                                       ^
% Invalid input detected at '^' marker.

R1_09010182327008(config-router)#network 192.168.1.0
R1_09010182327008(config-router)#network 192.168.100.0
R1_09010182327008(config-router)#no auto-summary
R1_09010182327008(config-router)#passive-interface fa0/0
R1_09010182327008(config-router)#end
R1_09010182327008#
%SYS-5-CONFIG_I: Configured from console by console
```

```
R1_09010182327008>enable
R1_09010182327008#
R1_09010182327008#sh ip route rip
     192.168.1.0/24 is variably subnetted, 2 subnets, 2 masks
R    192.168.2.0/24 [120/1] via 192.168.100.2, 00:00:08, FastEthernet0/1
R    192.168.3.0/24 [120/2] via 192.168.100.2, 00:00:08, FastEthernet0/1
R    192.168.4.0/24 [120/3] via 192.168.100.2, 00:00:08, FastEthernet0/1
     192.168.200.0/30 is subnetted, 1 subnets
R       192.168.200.0 [120/1] via 192.168.100.2, 00:00:08, FastEthernet0/1
     192.168.220.0/30 is subnetted, 1 subnets
R       192.168.220.0 [120/2] via 192.168.100.2, 00:00:08, FastEthernet0/1

R1_09010182327008#
```

- Konfigurasi R2

```
R2_09010182327008>enable
R2_09010182327008#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
R2_09010182327008(config)#int fa0/0
R2_09010182327008(config-if)#ip address 192.168.2.1 255.255.255.0
R2_09010182327008(config-if)#no sh
R2_09010182327008(config-if)#exit
R2_09010182327008(config)#int fa0/1
R2_09010182327008(config-if)#ip address 192.168.100.2 255.255.255.252
R2_09010182327008(config-if)#no sh
R2_09010182327008(config-if)#exit
R2_09010182327008(config)#int fa1/0
R2_09010182327008(config-if)#ip address 192.168.200.1 255.255.255.252
R2_09010182327008(config-if)#no sh
R2_09010182327008(config-if)#exit
R2_09010182327008(config)#counter rip
                          ^
% Invalid input detected at '^' marker.

R2_09010182327008(config)#rounter rip
                          ^
% Invalid input detected at '^' marker.

R2_09010182327008(config)#router rip
R2_09010182327008(config-router)#version 2
R2_09010182327008(config-router)#network 192.168.2.0
R2_09010182327008(config-router)#network 192.168.100.0
R2_09010182327008(config-router)#network 192.168.200.0
R2_09010182327008(config-router)#no auto-summary
R2_09010182327008(config-router)#passive-interface fa0/0
R2_09010182327008(config-router)#end
R2_09010182327008#
%SYS-5-CONFIG_I: Configured from console by console
```

```
R2_09010182327008>enable
R2_09010182327008#
R2_09010182327008#sh ip route rip
R    192.168.1.0/24 [120/1] via 192.168.100.1, 00:00:24, FastEthernet0/1
     192.168.2.0/24 is variably subnetted, 2 subnets, 2 masks
R    192.168.3.0/24 [120/1] via 192.168.200.2, 00:00:24, FastEthernet1/0
R    192.168.4.0/24 [120/2] via 192.168.200.2, 00:00:24, FastEthernet1/0
     192.168.220.0/30 is subnetted, 1 subnets
R       192.168.220.0 [120/1] via 192.168.200.2, 00:00:24, FastEthernet1/0

R2_09010182327008#
```

- Konfigurasi R3

```
R3_09010182327008#enable
R3_09010182327008#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
R3_09010182327008(config)#int fa0/0
R3_09010182327008(config-if)#ip address 192.168.3.1 255.255.255.0
R3_09010182327008(config-if)#no sh
R3_09010182327008(config-if)#ex
R3_09010182327008(config)#int fa0/1
R3_09010182327008(config-if)#ip address 192.168.200.2 255.255.255.252
R3_09010182327008(config-if)#no sh
R3_09010182327008(config-if)#exit
R3_09010182327008(config)#router rip
R3_09010182327008(config-router)#version 2
R3_09010182327008(config-router)#network 192.168.3.0
R3_09010182327008(config-router)#network 192.168.200.0
R3_09010182327008(config-router)#no auto-summary
R3_09010182327008(config-router)#passive-interface fa0/0
R3_09010182327008(config-router)#end
R3_09010182327008#
%SYS-5-CONFIG_I: Configured from console by console
```

```
R3_09010182327008>enable
R3_09010182327008#sh ip route rip
R    192.168.1.0/24 [120/2] via 192.168.200.1, 00:00:06, FastEthernet0/1
R    192.168.2.0/24 [120/1] via 192.168.200.1, 00:00:06, FastEthernet0/1
     192.168.3.0/24 is variably subnetted, 2 subnets, 2 masks
R    192.168.4.0/24 [120/1] via 192.168.220.2, 00:00:08, FastEthernet1/0
     192.168.100.0/30 is subnetted, 1 subnets
R       192.168.100.0 [120/1] via 192.168.200.1, 00:00:06, FastEthernet0/1
```

4. Lakukan PING dan Traceroute dari PC1 ke PC2 dan PC3, PC2 ke PC1 dan PC3, serta PC3 ke PC1 dan PC2.

No	Sumber	Tujuan	Hasil	
			Ya	Tidak
1	PC1	PC2	Ya	
		PC3	Ya	
2	PC2	PC1	Ya	
		PC3	Ya	
3	PC3	PC1	Ya	
		PC2	Ya	

PC 1

```
C:\>ping 192.168.2.10

Pinging 192.168.2.10 with 32 bytes of data:

Reply from 192.168.2.10: bytes=32 time<1ms TTL=126
Reply from 192.168.2.10: bytes=32 time<1ms TTL=126
Reply from 192.168.2.10: bytes=32 time<1ms TTL=126
Reply from 192.168.2.10: bytes=32 time<1ms TTL=126

Ping statistics for 192.168.2.10:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>ping 192.168.3.10

Pinging 192.168.3.10 with 32 bytes of data:

Reply from 192.168.3.10: bytes=32 time<1ms TTL=125
Reply from 192.168.3.10: bytes=32 time<1ms TTL=125
Reply from 192.168.3.10: bytes=32 time<1ms TTL=125
Reply from 192.168.3.10: bytes=32 time<1ms TTL=125

Ping statistics for 192.168.3.10:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>
```

PC 2

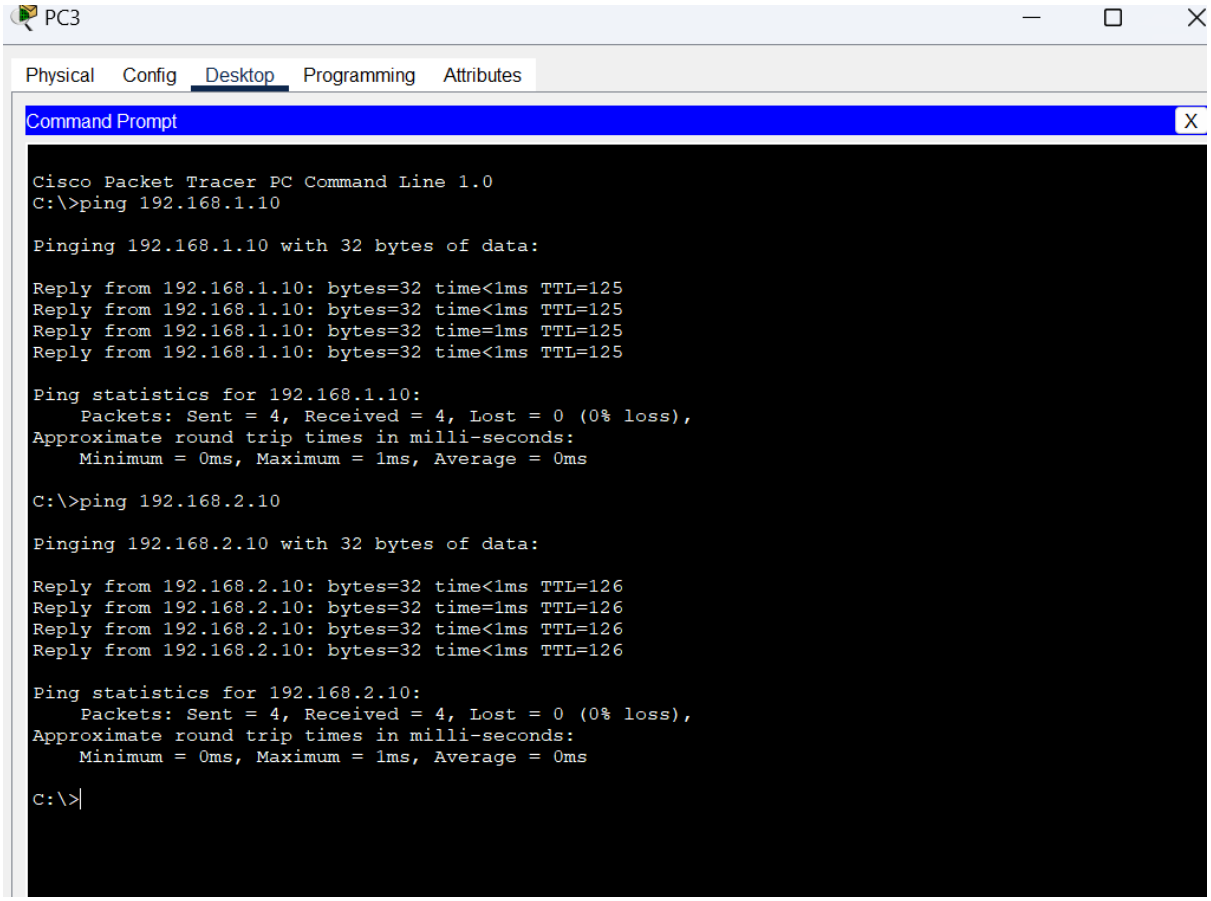
PC2

Physical Config Desktop Programming Attributes

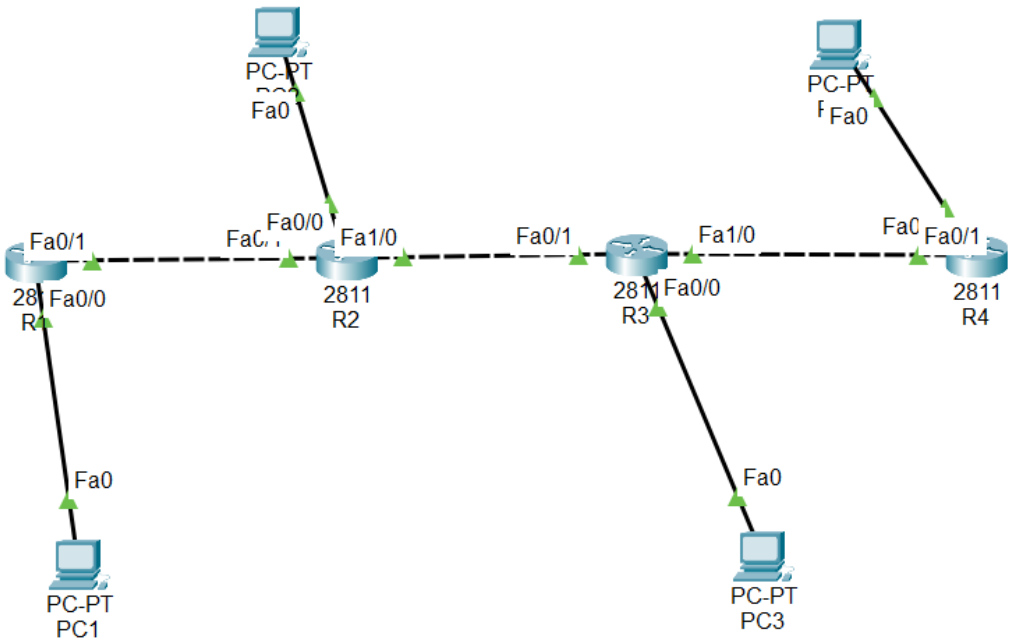
Command Prompt

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 192.168.1.10

Pinging 192.168.1.10 with 32 bytes of data:

Reply from 192.168.1.10: bytes=32 time<1ms TTL=126
Reply from 192.168.1.10: bytes=32 time<1ms TTL=126
Reply from 192.168.1.10: bytes=32 time<1ms TTL=126
Reply from 192.168.1.10: bytes=32 time<1ms TTL=126

Ping statistics for 192.168.1.10:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>ping 192.168.3.10

Pinging 192.168.3.10 with 32 bytes of data:

Reply from 192.168.3.10: bytes=32 time<1ms TTL=126
Reply from 192.168.3.10: bytes=32 time<1ms TTL=126
Reply from 192.168.3.10: bytes=32 time=5ms TTL=126
Reply from 192.168.3.10: bytes=32 time<1ms TTL=126

Ping statistics for 192.168.3.10:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 5ms, Average = 1ms

C:\>
```

PC 3



5. Tambahkan satu Router (R4) dan PC (PC4), dimana R4 terhubung ke R3 dan PC4 terhubung ke R4.



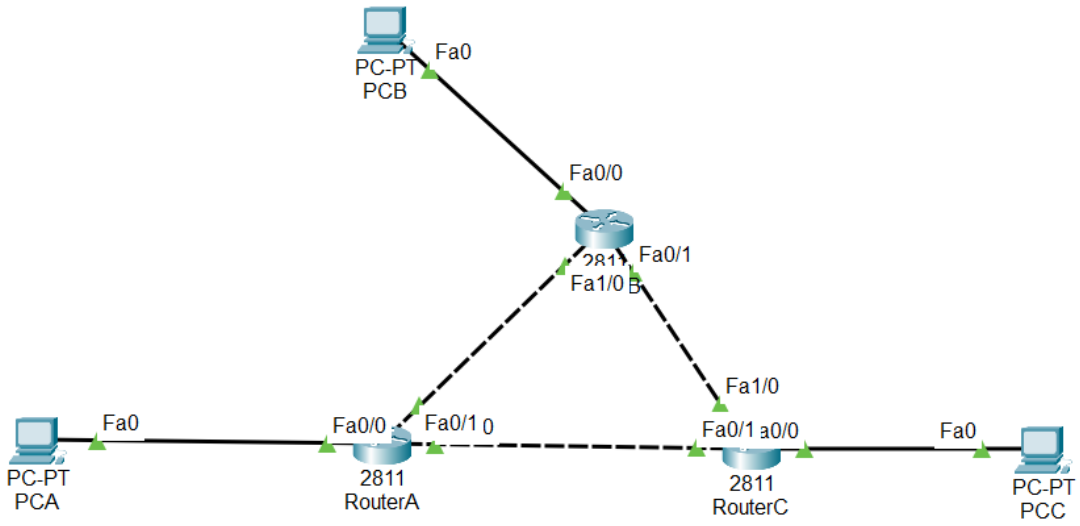
```
R3_09010182327008(config)#int fa1/0
R3_09010182327008(config-if)#ip address 192.168.220.1 255.255.255.252
R3_09010182327008(config-if)#no sh
R3_09010182327008(config-if)#ex
R3_09010182327008(config)#router rip
R3_09010182327008(config-router)#version 2
R3_09010182327008(config-router)#network 192.168.220.0
R3_09010182327008(config-router)#no auto-summary
R3_09010182327008(config-router)#passive-interface fa0/0
R3_09010182327008(config-router)#end
R3_09010182327008#
```

6. Konfigurasi Router dengan protokol RIP pada R4, dan konfigurasi IP pada PC4. Lakukanlah konfigurasi seperti tahap 3, buktikan jika PC4 dapat melakukan PING dan traceroute ke PC lainnya.\

```
R4_09010182327008>enable
R4_09010182327008#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
R4_09010182327008(config)#int fa0/0
R4_09010182327008(config-if)#ip address 192.168.4.1 255.255.255.0
R4_09010182327008(config-if)#no sh
R4_09010182327008(config-if)#exit
R4_09010182327008(config)#int fa0/1
R4_09010182327008(config-if)#ip address 192.168.220.2 255.255.255.252
R4_09010182327008(config-if)#no sh
R4_09010182327008(config-if)#ex
R4_09010182327008(config)#router rip
R4_09010182327008(config-router)#version 2
R4_09010182327008(config-router)#network 192.168.4.0
R4_09010182327008(config-router)#network 192.168.220.0
R4_09010182327008(config-router)#no auto-summary
R4_09010182327008(config-router)#passive-interface fa0/0
R4_09010182327008(config-router)#end
R4_09010182327008#
%SYS-5-CONFIG_I: Configured from console by console
```

```
R4_09010182327008#sh ip route rip
R    192.168.1.0/24 [120/3] via 192.168.220.1, 00:00:28, FastEthernet0/1
R    192.168.2.0/24 [120/2] via 192.168.220.1, 00:00:28, FastEthernet0/1
R    192.168.3.0/24 [120/1] via 192.168.220.1, 00:00:28, FastEthernet0/1
     192.168.100.0/30 is subnetted, 1 subnets
R       192.168.100.0 [120/2] via 192.168.220.1, 00:00:28, FastEthernet0/1
     192.168.200.0/30 is subnetted, 1 subnets
R       192.168.200.0 [120/1] via 192.168.220.1, 00:00:28, FastEthernet0/1

R4_09010182327008#
```

- **Konfigurasi EIGRP**



1. Buat Topologi Seperti Gambar diatas
2. Buat Pengalamat di PC

No	Nama Device	Alamat	Netmask	Gateway
1	PCA	192.168.1.10	255.255.255.0	192.168.1.1
2	PCB	192.168.2.10	255.255.255.0	192.168.2.1
3	PCC	192.168.3.10	255.255.255.0	192.168.3.1

3. Setelah selesai menambahkan konfigurasi IP Address di PC, selanjutnya melakukan konfigurasi EIGRP pada Router, sebagai berikut:

Router A

```
RouterA_09010182327008(config-if)#exit
RouterA_09010182327008(config)#router eigrp 1
RouterA_09010182327008(config-router)#network 192.168.1.0 0.0.0.255
RouterA_09010182327008(config-router)#network 100.100.100.0 0.0.0.3
RouterA_09010182327008(config-router)#network 100.100.100.4 0.0.0.3
RouterA_09010182327008(config-router)#no auto-summary
RouterA_09010182327008(config-router)#exit
```

```
RouterA_09010182327008>show ip route eigrp
     100.0.0.0/8 is variably subnetted, 5 subnets, 2 masks
D       100.100.100.8/30 [90/30720] via 100.100.100.6, 00:04:42, FastEthernet0/1
                         [90/30720] via 100.100.100.2, 00:02:52, FastEthernet1/0
     192.168.1.0/24 is variably subnetted, 2 subnets, 2 masks
D    192.168.2.0/24 [90/30720] via 100.100.100.6, 00:08:28, FastEthernet0/1
D    192.168.3.0/24 [90/30720] via 100.100.100.2, 00:02:52, FastEthernet1/0
```

Router B

```
routerB_09010182327008(config)#router eigrp 1
routerB_09010182327008(config-router)#]network 192.168.2.0 0.0.0.255
                                      ^
% Invalid input detected at '^' marker.

routerB_09010182327008(config-router)#network 192.168.2.0 0.0.0.255
routerB_09010182327008(config-router)#network 100.100.100.4 0.0.0.3
routerB_09010182327008(config-router)#
%DUAL-5-NBRCHANGE: IP-EIGRP 1: Neighbor 100.100.100.5 (FastEthernet1/0) is up: new adjacency

routerB_09010182327008(config-router)#network 100.100.100.8 0.0.0.3
routerB_09010182327008(config-router)#no auto-summary
routerB_09010182327008(config-router)#exit
routerB_09010182327008(config)#exit
routerB_09010182327008#
%SYS-5-CONFIG_I: Configured from console by console

routerB_09010182327008#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
```

```
routerB_09010182327008#show ip route eigrp
     100.0.0.0/8 is variably subnetted, 5 subnets, 2 masks
D       100.100.100.0/30 [90/30720] via 100.100.100.5, 00:03:39, FastEthernet1/0
                         [90/30720] via 100.100.100.10, 00:02:28, FastEthernet0/1
D    192.168.1.0/24 [90/30720] via 100.100.100.5, 00:08:04, FastEthernet1/0
     192.168.2.0/24 is variably subnetted, 2 subnets, 2 masks
D    192.168.3.0/24 [90/30720] via 100.100.100.10, 00:02:40, FastEthernet0/1
```

Router C

```
RouterC_09010182327008(config-if)#exit
RouterC_09010182327008(config)#router eigrp 1
RouterC_09010182327008(config-router)#network 192.168.3.0 0.0.0.255
RouterC_09010182327008(config-router)#network 100.100.100.8 0.0.0.3
RouterC_09010182327008(config-router)#
%DUAL-5-NBRCHANGE: IP-EIGRP 1: Neighbor 100.100.100.9 (FastEthernet1/0) is up: new adjacency

RouterC_09010182327008(config-router)#network 100.100.100.0 0.0.0.3
RouterC_09010182327008(config-router)#
%DUAL-5-NBRCHANGE: IP-EIGRP 1: Neighbor 100.100.100.1 (FastEthernet0/1) is up: new adjacency

RouterC_09010182327008(config-router)#no auto-summary
RouterC_09010182327008(config-router)#end
RouterC_09010182327008#
%SYS-5-CONFIG_I: Configured from console by console
```

```
RouterC_09010182327008#show ip route eigrp
     100.0.0.0/8 is variably subnetted, 5 subnets, 2 masks
D       100.100.100.4/30 [90/30720] via 100.100.100.9, 00:01:47, FastEthernet1/0
                         [90/30720] via 100.100.100.1, 00:01:34, FastEthernet0/1
D    192.168.1.0/24 [90/30720] via 100.100.100.1, 00:01:34, FastEthernet0/1
D    192.168.2.0/24 [90/30720] via 100.100.100.9, 00:01:47, FastEthernet1/0
```

4. Lakukan PING dan Traceroute dari PCA ke PCB dan PCC, PCB ke PCA dan PCC, serta PCC ke PCA dan PCB.

No	Sumber	Tujuan	Hasil	
			Ya	Tidak
1	PCA	PCB	Ya	
		PCC	Ya	
2	PCB	PCA	Ya	
		PCC	Ya	
3	PCC	PCA	Ya	
		PCB	Ya	

- PC A

```
C:\>ping 192.168.2.10

Pinging 192.168.2.10 with 32 bytes of data:

Reply from 192.168.2.10: bytes=32 time<1ms TTL=126
Reply from 192.168.2.10: bytes=32 time=18ms TTL=126
Reply from 192.168.2.10: bytes=32 time<1ms TTL=126
Reply from 192.168.2.10: bytes=32 time<1ms TTL=126

Ping statistics for 192.168.2.10:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 18ms, Average = 4ms

C:\>ping 192.168.3.10

Pinging 192.168.3.10 with 32 bytes of data:

Reply from 192.168.3.10: bytes=32 time<1ms TTL=126
Reply from 192.168.3.10: bytes=32 time<1ms TTL=126
Reply from 192.168.3.10: bytes=32 time<1ms TTL=126
Reply from 192.168.3.10: bytes=32 time<1ms TTL=126

Ping statistics for 192.168.3.10:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>
```

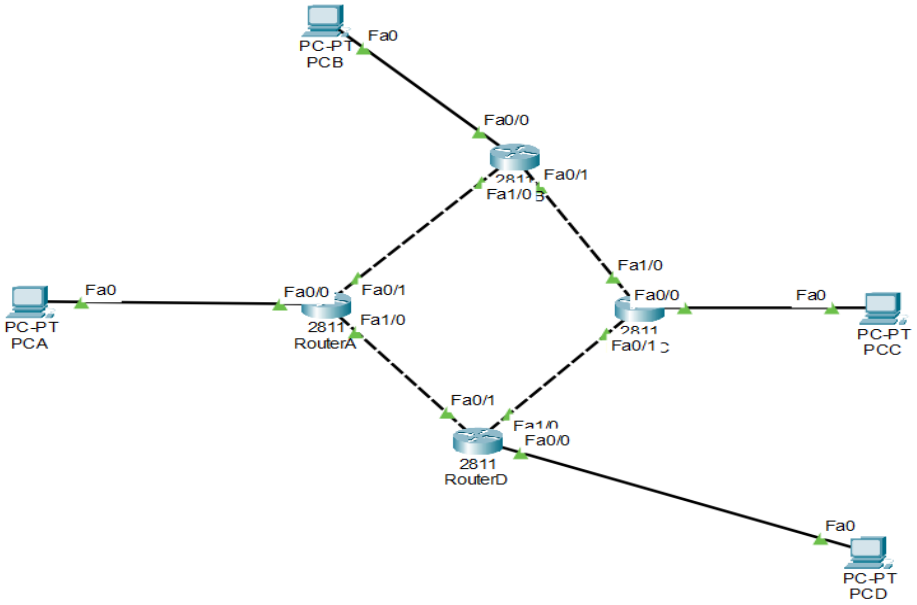
- PC B

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 192.168.1.10

Pinging 192.168.1.10 with 32 bytes of data:

Reply from 192.168.1.10: bytes=32 time<1ms TTL=126
Reply from 192.168.1.10: bytes=32 time<1ms TTL=126
Reply from 192.168.1.10: bytes=32 time<1ms TTL=126
Reply from 192.168.1.10: bytes=32 time<1ms TTL=126

Ping statistics for 192.168.1.10:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>ping 192.168.3.10

Pinging 192.168.3.10 with 32 bytes of data:

Reply from 192.168.3.10: bytes=32 time<1ms TTL=126
Reply from 192.168.3.10: bytes=32 time<1ms TTL=126
Reply from 192.168.3.10: bytes=32 time<1ms TTL=126
Reply from 192.168.3.10: bytes=32 time<1ms TTL=126

Ping statistics for 192.168.3.10:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>
```

- PC C

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 192.168.1.10

Pinging 192.168.1.10 with 32 bytes of data:

Reply from 192.168.1.10: bytes=32 time<1ms TTL=126
Reply from 192.168.1.10: bytes=32 time<1ms TTL=126
Reply from 192.168.1.10: bytes=32 time<1ms TTL=126
Reply from 192.168.1.10: bytes=32 time<1ms TTL=126

Ping statistics for 192.168.1.10:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>ping 192.168.3.10

Pinging 192.168.3.10 with 32 bytes of data:

Reply from 192.168.3.10: bytes=32 time<1ms TTL=128
Reply from 192.168.3.10: bytes=32 time=4ms TTL=128
Reply from 192.168.3.10: bytes=32 time=4ms TTL=128
Reply from 192.168.3.10: bytes=32 time=4ms TTL=128

Ping statistics for 192.168.3.10:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 4ms, Average = 3ms

C:\>
```

5. Putuskan koneksi pada RouterA ke RouterC, lalu tambahkan satu Router (RouterD) dan PC (PCD), dimana RouterD terhubung ke RouterA dan RouterC.



6. Konfigurasi Router dengan protokol EIGRP pada RouterD, dan konfigurasi IP pada PCD. Lakukanlah konfigurasi seperti tahap 3, buktikan jika PCD dapat melakukan PING dan traceroute ke PC lainnya.

```
C:\>ping 192.168.1.10

Pinging 192.168.1.10 with 32 bytes of data:

Reply from 192.168.1.10: bytes=32 time<1ms TTL=126
Reply from 192.168.1.10: bytes=32 time<1ms TTL=126
Reply from 192.168.1.10: bytes=32 time<1ms TTL=126
Reply from 192.168.1.10: bytes=32 time<1ms TTL=126

Ping statistics for 192.168.1.10:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>ping 192.168.2.10

Pinging 192.168.2.10 with 32 bytes of data:

Reply from 192.168.2.10: bytes=32 time<1ms TTL=125
Reply from 192.168.2.10: bytes=32 time<1ms TTL=125
Reply from 192.168.2.10: bytes=32 time<1ms TTL=125
Reply from 192.168.2.10: bytes=32 time<1ms TTL=125

Ping statistics for 192.168.2.10:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>ping 192.168.3.10

Pinging 192.168.3.10 with 32 bytes of data:

Reply from 192.168.3.10: bytes=32 time<1ms TTL=124
Reply from 192.168.3.10: bytes=32 time<1ms TTL=124
Reply from 192.168.3.10: bytes=32 time<1ms TTL=124
Reply from 192.168.3.10: bytes=32 time<1ms TTL=124

Ping statistics for 192.168.3.10:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms
```

Hasil Praktikum :

Pada praktikum ini, kami melakukan konfigurasi protokol Routing Information Protocol (RIP) untuk memastikan seluruh perangkat dapat saling berkomunikasi dalam topologi jaringan yang dibuat. Selain itu kami juga melakukan konfigurasi protokol EIGRP (Enhanced Interior Gateway Routing Protocol.

Hasil pengujian menunjukkan koneksi semua PC berhasil terjalin. dibuktikan dengan respon ping yang sukses.

Pada nomor 5 Konfigurasi EIGRP, kita memutus koneksi antara RouterA dan RouterC, kemudian menambahkan RouterD serta PCD ke topologi. Setelah konfigurasi EIGRP pada RouterD dan pemberian alamat IP pada PCD, pengujian konektivitas menunjukkan bahwa PCD juga berhasil terhubung dengan jaringan lainnya.

Analisa Praktikum :

Routing Information Protocol (RIP)

RIP adalah protokol routing yang sederhana dan merupakan salah satu yang pertama digunakan secara luas. RIP menggunakan distance vector routing untuk menentukan rute terbaik ke jaringan tujuan berdasarkan jumlah hop count (lompatan router).

Enhanced Interior Gateway Routing Protocol (EIGRP)

EIGRP adalah protokol routing yang lebih canggih dan merupakan pengembangan dari protokol IGRP oleh Cisco. EIGRP menggunakan hybrid routing protocol yang menggabungkan metode distance vector dan beberapa fitur dari link-state.

Praktikum ini menunjukkan bahwa EIGRP mampu mengonfigurasi routing dinamis antar-subnet secara cepat dan efisien.

Menggunakan DUAL (Diffusing Update Algorithm) yang memungkinkan EIGRP untuk menemukan jalur terbaik dan cadangan dengan cepat. Ketika ada perubahan topologi, EIGRP dapat menghitung ulang rute tanpa harus menunggu update periodik. Ini membuat waktu konvergensi jauh lebih cepat.

Kesimpulan :

Praktikum ini berhasil menunjukkan cara kerja protokol RIP dan EIGRP dalam mendistribusikan informasi routing di dalam jaringan. Konfigurasi RIP lebih mudah dilakukan. Biasanya hanya perlu mengaktifkan RIP di router dan menentukan jaringan yang akan didistribusikan. Tidak ada banyak parameter yang perlu disesuaikan seperti di EIGRP.

EIGRP unggul dalam banyak aspek dibandingkan RIP, terutama dalam hal kecepatan konvergensi, efisiensi penggunaan bandwidth, kemampuan untuk menangani jaringan yang lebih besar, serta dukungan untuk metrik yang lebih canggih dan load balancing yang lebih fleksibel. Sementara RIP lebih mudah diimplementasikan, EIGRP lebih cocok untuk jaringan yang besar dan kompleks, di mana performa, fleksibilitas, dan efisiensi sangat diperlukan.

Hasil pengujian konektivitas menunjukkan bahwa EIGRP bekerja dengan baik, memungkinkan semua perangkat dalam jaringan terhubung satu sama lain tanpa hambatan.