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Modul: VII

Tugas Modul VII

Kegiatan 1.

Tugas 11A Tuliskan langkah penambahan route table (Static Route) pada router Puma dan router Eagle.

➤ Eagle

```
Router#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#ip route 172.21.20.20 255.255.255.0 172.21.1.2
%Inconsistent address and mask
Router(config)#ip route 172.21.20.0 255.255.255.0 172.21.1.2
Router(config)#ip route 172.21.30.0 255.255.255.0 172.21.2.3
Router(config)#ex
Router#
%SYS-5-CONFIG_I: Configured from console by console
```

➤ Puma

```
Router>en
Router#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#ip route 172.21.10.0 255.255.255.0 172.21.1.1
Router(config)#ip route 172.21.30.0 255.255.255.0 172.21.3.3
Router(config)#ex
Router#
%SYS-5-CONFIG_I: Configured from console by console
```

Tugas 12A Apakah mendapat tanggapan dari Leo? Jelaskan secara singkat!

➤ Ya, karena telah dibuat routing untuk data melalui jalur tersebut.

Tugas 12B Jika alamat jaringan pada segmen Leo diubah dari 172.21.10.0/24 menjadi 172.21.100/24. Tuliskan langkah perubahan konfigurasi yang dilakukan pada setiap router agar PC Leo dapat dihubungi(ping) dari PC Aries dan Virgo. Mengapa langkah-langkah tersebut harus dilakukan?

- Lakukan konfigurasi pada router Eagle.
- Lakukan konfigurasi pada PC Leo dan ubah default gateway.
- Lakukan routing pada masing-masing router sesuai dengan blok ip PC.
- Lakukan pengecekan dengan cara ping.

Kegiatan 2.

Tugas 4A Berapa nomor alamat jaringan yang terdaftar pada konfigurasi routing RIP?

- 172.21.0.0

Tugas 4B Mengapa alamat jaringan yang langsung terhubung dengan interface e0(172.21.10.0), s0(172.21.1.0), dan s1(172.21.2.0) tidak didaftarkan ke konfigurasi routing RIP?

- Karena pada 172.21.0.0 telah mencakup semua alamat jaringan.

Tugas 5A Jelaskan secara singkat proses tersebut

- Debug IP RIP

```
Router#debug ip rip
RIP protocol debugging is on
Router#
Router#RIP: sending v1 update to 255.255.255.255 via
FastEthernet0/0 (172.21.10.10)
RIP: build update entries
    network 172.21.1.0 metric 1
    network 172.21.2.0 metric 1
RIP: sending v1 update to 255.255.255.255 via Serial2/0
(172.21.1.1)
RIP: build update entries
    network 172.21.2.0 metric 1
    network 172.21.10.0 metric 1
RIP: sending v1 update to 255.255.255.255 via Serial3/0
(172.21.2.1)
RIP: build update entries
    network 172.21.1.0 metric 1
    network 172.21.10.0 metric 1
RIP: sending v1 update to 255.255.255.255 via FastEthernet0/0
(172.21.10.10)
RIP: build update entries
    network 172.21.1.0 metric 1
    network 172.21.2.0 metric 1
```

Tugas 6A Tuliskan langkah konfigurasi routing RIP yang dilakukan pada salah satu router(Puma dan Tiger)

- Konfigurasi router Puma

```
Router>en
Router#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#router rip
Router(config-router)#network 172.21.0.0
Router(config-router)#ex
Router(config)#ex
Router#
```

Tugas 6B Jelaskan secara singkat proses update yang terjadi pada router Eagle ketika konfigurasi salah satu router(Puma atau Tiger) dilakukan. Perhatikan bagian “RIP:Received updated from 172.21.x.x on serialX” dan tambahan subnet yang terjadi.

➤ Update yang terjadi

```
Router#debug ip rip
RIP protocol debugging is on
Router#RIP: received v1 update from 172.21.1.1 on Serial2/0
    172.21.2.0 in 1 hops
    172.21.10.0 in 1 hops
RIP: sending v1 update to 255.255.255.255 via FastEthernet0/0
(172.21.20.20)
RIP: build update entries
    network 172.21.1.0 metric 1
    network 172.21.2.0 metric 2
    network 172.21.3.0 metric 1
    network 172.21.10.0 metric 2
RIP: sending v1 update to 255.255.255.255 via Serial2/0
(172.21.1.2)
RIP: build update entries
    network 172.21.3.0 metric 1
    network 172.21.20.0 metric 1
RIP: sending v1 update to 255.255.255.255 via Serial3/0
(172.21.3.2)
RIP: build update entries
    network 172.21.1.0 metric 1
    network 172.21.2.0 metric 2
    network 172.21.10.0 metric 2
    network 172.21.20.0 metric 1
```

Tugas 6C Jika alamat pada segmen Leo diubah dari 172.21.100.0/24. Apakah perlu dilakukan perubahan konfigurasi pada setiap router agar PC leo dapat dihubungi (ping) dari PC aries dan virgo? Mengapa demikian?

- Tidak perlu, karena network yang digunakan masih dalam satu jaringan.

Tugas 8A Jelaskan secara singkat proses update yang terjadi pada router eagle. (Perhatikan bagian "RIP : Received Updated from 172.21.2.3 on Serial1" dan perubahan hops dari subnet 172.21.20.0 yang terjadi)

- Routing otomatis di downkan dan dimana melalui serial 3/0 yang terjadi di mana hops juga berubah.

Tugas 9A Apakah hasil yang diperoleh berbeda dengan langkah 8 diatas(ketika langkah 8 belum dilakukan)? Jelaskan secara singkat mengapa demikian.

- Routing menghasilkan RTO karena jaringan tidak terhubung.

```
Packet Tracer PC Command Line 1.0
C:\>tracert 172.21.20.2

Tracing route to 172.21.20.2 over a maximum of 30 hops:

  1  10 ms      0 ms      0 ms      172.21.10.10
  2   1 ms      0 ms      1 ms      172.21.1.2
  3   *         0 ms      0 ms      172.21.20.2

Trace complete.
```

Kegiatan 3

Tugas 4A Berapa nomor alamat jaringan yang terdaftar pada konfigurasi routing EIGRP?

- 172.21.0.0

Tugas 5A Jelaskan secara singkat proses tersebut?

- Terjadi suatu transaksi yang mengirim tanda untuk router lain dan komputer melalui fa dan serial.

```
Router#debug eigrp packet
EIGRP Packets debugging is on
  (UPDATE, REQUEST, QUERY, REPLY, HELLO, ACK )
Router#
EIGRP: Sending HELLO on Serial3/0
  AS 100, Flags 0x0, Seq 1/0 idbQ 0/0 iidbQ un/rely 0/0

EIGRP: Sending HELLO on Serial2/0
  AS 100, Flags 0x0, Seq 1/0 idbQ 0/0 iidbQ un/rely 0/0

EIGRP: Sending HELLO on FastEthernet0/0
  AS 100, Flags 0x0, Seq 1/0 idbQ 0/0 iidbQ un/rely 0/0
```

Tugas 7A Tuliskan langkah konfigurasi routing EIGRP yang dilakukan pada salah satu router(puma atau tiger).

```
Router>en
Router#conf term
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#router eigrp 100
Router(config-router)#network 172.21.0.0
Router(config-router)#
%DUAL-5-NBRCHANGE: IP-EIGRP 100: Neighbor 172.21.1.1 (Serial2/0)
is up: new adjacency
```

Tugas 7B Jelaskan secara singkat proses update yang terjadi pada router eagle ketika konfigurasi salah satu router(Puma atau Tiger) dilakukan. (Perhatikan bagian “EIGRP : Received updated from 172.21.X.X on SerialX” dan tambahan subnet yang terjadi)

- Setelah router Puma dikonfigurasi, maka di router Eagle otomatis meng-update kemudian mengirim ACK hingga proses selesai.

Tugas 7C Jika alamat jaringan pada segmen leo diubah dari 172.21.10.0/24 menjadi 172.21.100.0/24. Apakah perlu dilakukan perubahan konfigurasi pada setiap router agar PC leo dapat dihubungi(ping) dari PC aries dan virgo? Mengapa demikian?

- Tidak perlu. Karena tetap berada pada jaringan yang sama dan routing sudah dinamis.

Tugas 9A *Jelaskan secara singkat proses update yang terjadi pada router eagle.(Perhatikan bagian “EIGRP : Received updated from 172.21.2.3 on Serial1”)*

- Setelah pemutusan pada router Puma dan Eagle pada router Puma, maka akan ada notifikasi dan update pada router Eagle.

Tugas 10A *Apakah hasil yang diperoleh berbeda dengan langkah 8 diatas(ketika langkah 9 belum dilakukan)? Jelaskan secara singkat mengapa demikian.*

- Setelah router terputus waktu yang dibutuhkan untuk mengirim data menjadi berbeda, dan terdapat perbedaan pada hops yang dilalui.

```
Packet Tracer PC Command Line 1.0
C:\>tracert 172.21.20.2

Tracing route to 172.21.20.2 over a maximum of 30 hops:

  1    25 ms      0 ms      0 ms      172.21.10.10
  2     1 ms      4 ms      0 ms      172.21.1.2
  3     *         0 ms      3 ms      172.21.20.2

Trace complete.
```

```
C:\>tracert 172.21.20.2

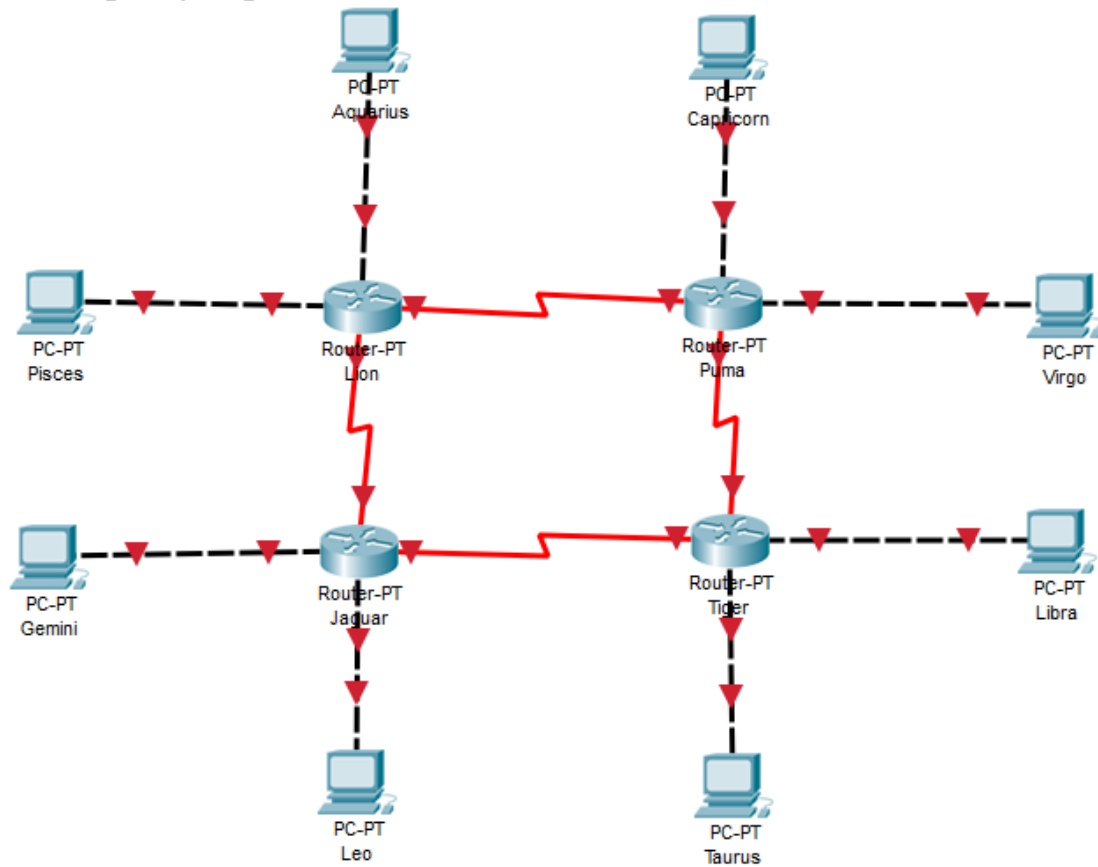
Tracing route to 172.21.20.2 over a maximum of 30 hops:

  1     0 ms      0 ms      0 ms      172.21.10.10
  2     0 ms      1 ms      1 ms      172.21.2.3
  3     2 ms      5 ms      0 ms      172.21.3.2
  4    13 ms      1 ms     11 ms      172.21.20.2

Trace complete.
```

Tugas 1. Static Routing

1. Buat Topologi seperti berikut.



2. Konfigurasi masing-masing router.

- Lion

```
Router>enable
Router#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#int fa 0/0
Router(config-if)#ip address 172.21.10.10 255.255.255.0
Router(config-if)#no shutdown
Router(config-if)#int fa 1/0
Router(config-if)#ip address 172.21.20.20 255.255.255.0
Router(config-if)#no shutdown
Router(config-if)#int se 2/0
Router(config-if)#clock rate 2000000
Router(config-if)#ip address 172.21.1.1 255.255.255.0
Router(config-if)#no shutdown
Router(config-if)#int se 3/0
Router(config-if)#clock rate 2000000
Router(config-if)#ip address 172.21.2.1 255.255.255.0
Router(config-if)#no shutdown
Router(config-if)#
```


- Puma

```
Router#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#int fa 0/0
Router(config-if)#ip address 172.21.30.30 255.255.255.0
Router(config-if)#no shutdown
Router(config-if)#int fa 1/0
Router(config-if)#ip address 172.21.40.40 255.255.255.0
Router(config-if)#no shutdown
Router(config-if)#int se 2/0
Router(config-if)#ip address 172.21.1.2 255.255.255.0
Router(config-if)#int se 3/0
Router(config-if)#clock rate 2000000
Router(config-if)#ip address 172.21.3.1 255.255.255.0
Router(config-if)#no shutdown
```

- Tiger

```
Router#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#int fa 0/0
Router(config-if)#ip address 172.21.50.50 255.255.255.0
Router(config-if)#no shutdown
Router(config-if)#int fa 1/0
Router(config-if)#ip address 172.21.60.60 255.255.255.0
Router(config-if)#no shutdown
Router(config-if)#int se 2/0
Router(config-if)#clock rate 2000000
Router(config-if)#ip address 172.21.4.1 255.255.255.0
Router(config-if)#no shutdown
Router(config-if)#int se 3/0
Router(config-if)#ip address 172.21.3.2 255.255.255.0
Router(config-if)#no shutdown
```

- Jaguar

```
Router>enable
Router#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#int fa 0/0
Router(config-if)#ip address 172.21.70.70 255.255.255.0
Router(config-if)#no shutdown
Router(config-if)#int fa 1/0
Router(config-if)#ip address 172.21.80.80 255.255.255.0
Router(config-if)#no shutdown
Router(config-if)#int se 2/0
Router(config-if)#ip address 172.21.4.2 255.255.255.0
Router(config-if)#no shutdown
Router(config-if)#int se 3/0
Router(config-if)#ip address 172.21.2.2 255.255.255.0
Router(config-if)#no shutdown
```

3. Konfigurasi pada setiap PC.

- PC Pisces

Pisces — □

Physical	Config	Desktop	Programming	Attributes
<input type="radio"/> DHCP		<input checked="" type="radio"/> Static		
IP Address		<input type="text" value="172.21.10.1"/>		
Subnet Mask		<input type="text" value="255.255.255.0"/>		
Default Gateway		<input type="text" value="172.21.10.10"/>		
DNS Server		<input type="text" value="0.0.0.0"/>		

- PC Aquarius

Aquarius — □

Physical	Config	Desktop	Programming	Attributes
<input type="radio"/> DHCP		<input checked="" type="radio"/> Static		
IP Address		<input type="text" value="172.21.20.1"/>		
Subnet Mask		<input type="text" value="255.255.255.0"/>		
Default Gateway		<input type="text" value="172.21.20.20"/>		
DNS Server		<input type="text" value="0.0.0.0"/>		

- PC Capricorn

Capricorn — □

Physical	Config	Desktop	Programming	Attributes
<input type="radio"/> DHCP		<input checked="" type="radio"/> Static		
IP Address		<input type="text" value="172.21.30.1"/>		
Subnet Mask		<input type="text" value="255.255.255.0"/>		
Default Gateway		<input type="text" value="172.21.30.30"/>		
DNS Server		<input type="text" value="0.0.0.0"/>		

- PC Virgo

Virgo — □

Physical	Config	Desktop	Programming	Attributes
<input type="radio"/> DHCP		<input checked="" type="radio"/> Static		
IP Address		<input type="text" value="172.21.40.1"/>		
Subnet Mask		<input type="text" value="255.255.255.0"/>		
Default Gateway		<input type="text" value="172.21.40.40"/>		
DNS Server		<input type="text" value="0.0.0.0"/>		

- **PC Libra**

Libra

Physical

Config

Desktop

Programming

Attributes

☐ DHCP

☒ Static

IP Address

172.21.50.1

Subnet Mask

255.255.255.0

Default Gateway

172.21.50.50

DNS Server

0.0.0.0

- **PC Taurus**

Taurus

Physical

Config

Desktop

Programming

Attributes

☐ DHCP

☒ Static

IP Address

172.21.60.1

Subnet Mask

255.255.255.0

Default Gateway

172.21.60.60

DNS Server

0.0.0.0

- **PC Leo**

Leo

Physical

Config

Desktop

Programming

Attributes

☐ DHCP

☒ Static

IP Address

172.21.70.1

Subnet Mask

255.255.255.0

Default Gateway

172.21.70.70

DNS Server

0.0.0.0

- **PC Gemini**

Gemini

Physical

Config

Desktop

Programming

Attributes

☐ DHCP

☒ Static

IP Address

172.21.80.1

Subnet Mask

255.255.255.0

Default Gateway

172.21.80.80

DNS Server

0.0.0.0

4. Uji koneksi.

- Ping dari PC Aquarius ke router Lion

```
C:\>ping 172.21.1.1

Pinging 172.21.1.1 with 32 bytes of data:

Reply from 172.21.1.1: bytes=32 time=64ms TTL=255
Reply from 172.21.1.1: bytes=32 time<1ms TTL=255
Reply from 172.21.1.1: bytes=32 time<1ms TTL=255
Reply from 172.21.1.1: bytes=32 time<1ms TTL=255

Ping statistics for 172.21.1.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 64ms, Average = 16ms

C:\>ping 172.21.2.1

Pinging 172.21.2.1 with 32 bytes of data:

Reply from 172.21.2.1: bytes=32 time=1ms TTL=255
Reply from 172.21.2.1: bytes=32 time<1ms TTL=255
Reply from 172.21.2.1: bytes=32 time<1ms TTL=255
Reply from 172.21.2.1: bytes=32 time<1ms TTL=255

Ping statistics for 172.21.2.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 1ms, Average = 0ms

C:\>|
```

- Dari router Lion ke router Puma

```
Router>ping 172.21.1.2

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 172.21.1.2, timeout is 2 seconds:
!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 1/1/2 ms
```

5. Melakukan routing.

- Lion

```
Router(config)#ip route 172.21.30.0 255.255.255.0 172.21.1.2
Router(config)#ip route 172.21.40.0 255.255.255.0 172.21.1.2
Router(config)#ip route 172.21.50.0 255.255.255.0 172.21.1.2
Router(config)#ip route 172.21.60.0 255.255.255.0 172.21.1.2
Router(config)#ip route 172.21.70.0 255.255.255.0 172.21.2.2
Router(config)#ip route 172.21.80.0 255.255.255.0 172.21.2.2
Router(config)#|
```

- Puma

```
Router(config)#ip route 172.21.10.0 255.255.255.0 172.21.1.1
Router(config)#ip route 172.21.20.0 255.255.255.0 172.21.1.1
Router(config)#ip route 172.21.50.0 255.255.255.0 172.21.3.2
Router(config)#ip route 172.21.60.0 255.255.255.0 172.21.3.2
Router(config)#ip route 172.21.70.0 255.255.255.0 172.21.3.2
Router(config)#ip route 172.21.80.0 255.255.255.0 172.21.3.2
Router(config)#|
```

- **Tiger**

```
Router(config)#ip route 172.21.10.0 255.255.255.0 172.21.4.2
Router(config)#ip route 172.21.20.0 255.255.255.0 172.21.4.2
Router(config)#ip route 172.21.30.0 255.255.255.0 172.21.3.1
Router(config)#ip route 172.21.40.0 255.255.255.0 172.21.3.1
Router(config)#ip route 172.21.70.0 255.255.255.0 172.21.4.2
Router(config)#ip route 172.21.80.0 255.255.255.0 172.21.4.2
Router(config)#
```

- **Jaguar**

```
Router(config)#ip route 172.21.10.0 255.255.255.0 172.21.2.1
Router(config)#ip route 172.21.20.0 255.255.255.0 172.21.2.1
Router(config)#ip route 172.21.30.0 255.255.255.0 172.21.2.1
Router(config)#ip route 172.21.40.0 255.255.255.0 172.21.2.1
Router(config)#ip route 172.21.50.0 255.255.255.0 172.21.4.1
Router(config)#ip route 172.21.60.0 255.255.255.0 172.21.4.1
Router(config)#
```

6. Show IP Route

- **Lion**

```
Router#sh 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 not set

172.21.0.0/24 is subnetted, 10 subnets
C      172.21.1.0 is directly connected, Serial2/0
C      172.21.2.0 is directly connected, Serial3/0
C      172.21.10.0 is directly connected, FastEthernet0/0
C      172.21.20.0 is directly connected, FastEthernet1/0
S      172.21.30.0 [1/0] via 172.21.1.2
S      172.21.40.0 [1/0] via 172.21.1.2
S      172.21.50.0 [1/0] via 172.21.1.2
S      172.21.60.0 [1/0] via 172.21.1.2
S      172.21.70.0 [1/0] via 172.21.2.2
S      172.21.80.0 [1/0] via 172.21.2.2
```

- Puma

```
Router#sh 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 not set

    172.21.0.0/24 is subnetted, 10 subnets
C       172.21.1.0 is directly connected, Serial2/0
C       172.21.3.0 is directly connected, Serial3/0
S       172.21.10.0 [1/0] via 172.21.1.1
S       172.21.20.0 [1/0] via 172.21.1.1
C       172.21.30.0 is directly connected, FastEthernet0/0
C       172.21.40.0 is directly connected, FastEthernet1/0
S       172.21.50.0 [1/0] via 172.21.3.2
S       172.21.60.0 [1/0] via 172.21.3.2
S       172.21.70.0 [1/0] via 172.21.3.2
S       172.21.80.0 [1/0] via 172.21.3.2
```

- Tiger

```
Router#sh 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 not set

    172.21.0.0/24 is subnetted, 10 subnets
C       172.21.3.0 is directly connected, Serial3/0
C       172.21.4.0 is directly connected, Serial2/0
S       172.21.10.0 [1/0] via 172.21.4.2
S       172.21.20.0 [1/0] via 172.21.4.2
S       172.21.30.0 [1/0] via 172.21.3.1
S       172.21.40.0 [1/0] via 172.21.3.1
C       172.21.50.0 is directly connected, FastEthernet0/0
C       172.21.60.0 is directly connected, FastEthernet1/0
S       172.21.70.0 [1/0] via 172.21.4.2
S       172.21.80.0 [1/0] via 172.21.4.2
```

- Jaguar

```
Router#sh 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 not set

    172.21.0.0/24 is subnetted, 10 subnets
C       172.21.2.0 is directly connected, Serial3/0
C       172.21.4.0 is directly connected, Serial2/0
S       172.21.10.0 [1/0] via 172.21.2.1
S       172.21.20.0 [1/0] via 172.21.2.1
S       172.21.30.0 [1/0] via 172.21.2.1
S       172.21.40.0 [1/0] via 172.21.2.1
S       172.21.50.0 [1/0] via 172.21.4.1
S       172.21.60.0 [1/0] via 172.21.4.1
C       172.21.70.0 is directly connected, FastEthernet0/0
C       172.21.80.0 is directly connected, FastEthernet1/0
```

7. Ping PC Pisces ke PC Libra.

```
C:\>ping 172.21.50.1

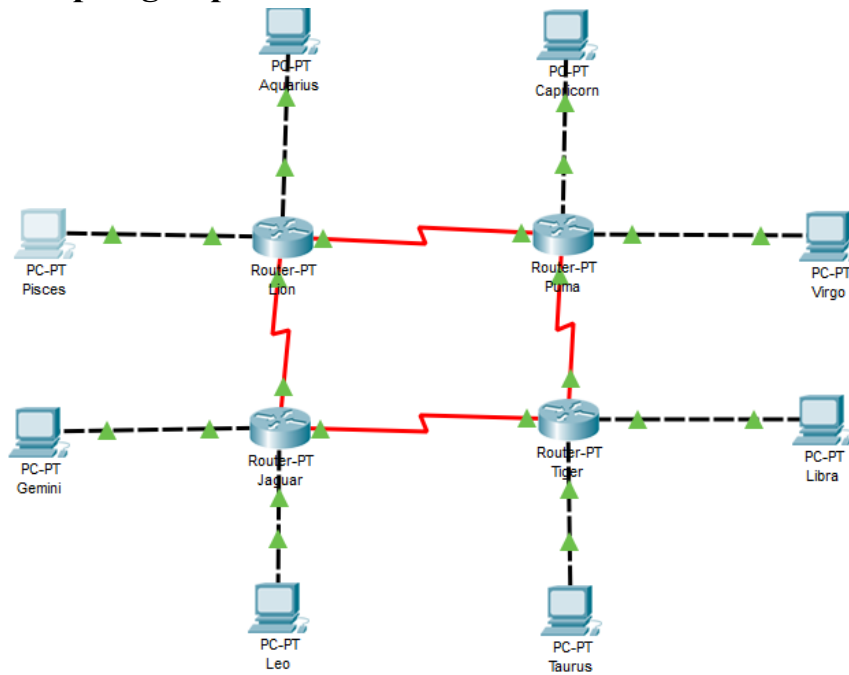
Pinging 172.21.50.1 with 32 bytes of data:

Request timed out.
Reply from 172.21.50.1: bytes=32 time=13ms TTL=125
Reply from 172.21.50.1: bytes=32 time=5ms TTL=125
Reply from 172.21.50.1: bytes=32 time=13ms TTL=125

Ping statistics for 172.21.50.1:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 5ms, Maximum = 13ms, Average = 10ms
```

Tugas 2. RIP

1. Buat Topologi seperti berikut.



2. Melakukan konfigurasi dan routing

- Lion

```
Router>en
Router#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#router rip
Router(config-router)#network 172.21.0.0
Router(config-router)#ex
Router(config)#
```

- Puma

```
Router>en
Router#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#router rip
Router(config-router)#network 172.21.0.0
Router(config-router)#ex
Router(config)#
```

- Tiger

```
Router>en
Router#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#router rip
Router(config-router)#network 172.21.0.0
Router(config-router)#ex
Router(config)#
```


- **Jaguar**

```
Router>en
Router#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#router rip
Router(config-router)#network 172.21.0.0
Router(config-router)#ex
Router(config)#
```

3. Uji koneksi PC Leo ke PC Capricorn

```
C:\>ping 172.21.30.1

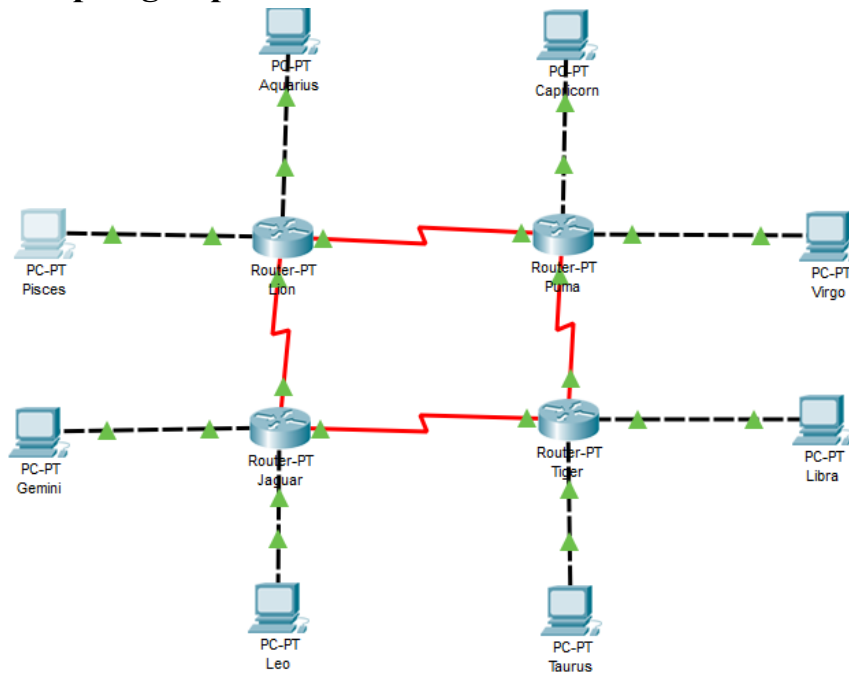
Pinging 172.21.30.1 with 32 bytes of data:

Request timed out.
Reply from 172.21.30.1: bytes=32 time=2ms TTL=125
Reply from 172.21.30.1: bytes=32 time=3ms TTL=123
Reply from 172.21.30.1: bytes=32 time=7ms TTL=123

Ping statistics for 172.21.30.1:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 2ms, Maximum = 7ms, Average = 4ms
```

Tugas 3. EIGRP

1. Buat Topologi seperti berikut.



2. Melakukan konfigurasi dan routing secara otomatis.

- Lion

```
Router>enable
Router#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#router eigrp 100
Router(config-router)#network 172.21.0.0
Router(config-router)#
```

- Puma

```
Router>enable
Router#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#router eigrp 100
Router(config-router)#network 172.21.0.0
Router(config-router)#
```

- Tiger

```
Router>enable
Router#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#router eigrp 100
Router(config-router)#network 172.21.0.0
Router(config-router)#
```

- Jaguar

```
Router>enable
Router#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#router eigrp 100
Router(config-router)#network 172.21.0.0
Router(config-router)#
```

3. Ping PC Libra ke PC Pisces

```
C:\>ping 172.21.10.1

Pinging 172.21.10.1 with 32 bytes of data:

Request timed out.
Reply from 172.21.10.1: bytes=32 time=2ms TTL=125
Reply from 172.21.10.1: bytes=32 time=6ms TTL=125
Reply from 172.21.10.1: bytes=32 time=3ms TTL=125

Ping statistics for 172.21.10.1:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 2ms, Maximum = 6ms, Average = 3ms
```