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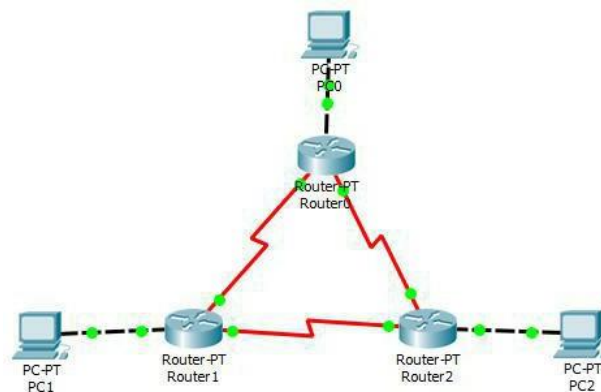
Modul: 7

A. KEGIATAN I & KEGIATAN 2 STATIC ROUTING

Static routing (Routing Statis) adalah sebuah router yang memiliki tabel routing statik yang di setting secara manual oleh para administrator jaringan. Routing static pengaturan routing paling sederhana yang dapat dilakukan pada jaringan komputer

Langkah Kegiatan :

1. Buat Topologi seperti berikut menggunakan packet tracer ini dengan menggunakan router generic :



2. Berinama masing masing router, **router 0: eagle, router 1: puma, router 2: tiger**
3. Konfigurasi Ethernet dan Serial yang terkoneksi kabel pada masing masing router dengan ketentuan seperti di MODUL-7
4. Konfigurasi masing masing PC dengan Gateway pada masing gateway router. Seperti ketentuan pada modul yakni :
 - Leo : PC 0
Dengan IP 172.21.10.1 gateway 172.21.10.10
 - Aries : PC 1
Dengan IP 172.21.20.2 gateway 172.21.20.20
 - Virgo : PC 2
Dengan IP 172.21.30.3 gateway 172.21.2030

5. Lakukan PING pada masing masing PC ke masing masing Gateway.

```
C:\>ping 172.21.20.20

Pinging 172.21.20.20 with 32 bytes of data:

Reply from 172.21.20.20: bytes=32 time<1ms TTL=255
Reply from 172.21.20.20: bytes=32 time<1ms TTL=255
Reply from 172.21.20.20: bytes=32 time<1ms TTL=255
Reply from 172.21.20.20: bytes=32 time<1ms TTL=255

Ping statistics for 172.21.20.20:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms
```

(Contoh Apabila Berhasil, dari PC 1 ke Gatewaynya)

6. Pada langkah ini belum ada ROUTING STATIC dan apabila dijalankan ping dari PC 1 ke PC 0 atau PC 2 atau sebaliknya maka akan gagal maka kita harus konfigurasi STATIC ROUTING dengan menembakan next hop dan network pada router.
7. Konfigurasi STATIC Routing pada masing masing router.

- **Router 0 (Next HOP Network dan Serial Router 1 & Router 2)**

```
ip route 172.21.20.0 255.255.255.0 172.21.1.2
Router(config)#
```

```
Router(config)#ip route 172.21.30.0 255.255.255.0 172.21.2.3
Router(config)#
```

- **Router 1 (Next HOP network dan Serial Router 0 & 2)**

```
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)#
```

- **Router 2 (Next HOP network dan Serial Router 0 & 1)**

```
Router(config)#ip route 172.21.20.0 255.255.255.0 172.21.3.2
Router(config)#
```

```
Router(config)#ip route 172.21.10.0 255.255.255.0 172.21.2.1
Router(config)#
```

8. Setelah Konfigurasi Selesai, Uji coba dengan PING dari PC Aries ke Leo dan Virgo

```
C:\>ping 172.21.10.1

Pinging 172.21.10.1 with 32 bytes of data:

Reply from 172.21.10.1: bytes=32 time=2ms TTL=126
Reply from 172.21.10.1: bytes=32 time=2ms TTL=126
Reply from 172.21.10.1: bytes=32 time=3ms TTL=126
Reply from 172.21.10.1: bytes=32 time=1ms TTL=126

Ping statistics for 172.21.10.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 1ms, Maximum = 3ms, Average = 2ms
```

(ARIES KE LEO)

```
C:\>ping 172.21.30.3

Pinging 172.21.30.3 with 32 bytes of data:

Reply from 172.21.30.3: bytes=32 time=1ms TTL=126
Reply from 172.21.30.3: bytes=32 time=3ms TTL=126
Reply from 172.21.30.3: bytes=32 time=2ms TTL=126
Reply from 172.21.30.3: bytes=32 time=4ms TTL=126

Ping statistics for 172.21.30.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 1ms, Maximum = 4ms, Average = 2ms
```

(ARIES KE VIRGO)

9. IP ROUTE

```
172.21.0.0/24 is subnetted, 5 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
S    172.21.20.0 [1/0] via 172.21.1.2
S    172.21.30.0 [1/0] via 172.21.2.3
```

(ROUTER0)

```
172.21.0.0/24 is subnetted, 5 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
C    172.21.20.0 is directly connected, FastEthernet0/0
S    172.21.30.0 [1/0] via 172.21.3.3
```

(ROUTER1)

```
172.21.0.0/24 is subnetted, 5 subnets
C    172.21.2.0 is directly connected, Serial3/0
C    172.21.3.0 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 172.21.3.2
C    172.21.30.0 is directly connected, FastEthernet0/0
```

(ROUTER2)

