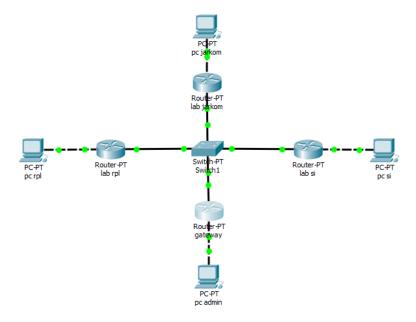
Nama : Yarin Nanditya A NIM : L200170155

Kelas : D

Kegiatan Praktikum Jaringan Komputer

Modul 11

1. Buat Topologi



2. Konfigurasi semua router

- Konfigurasi Router 1

```
Router>en
Router#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Router(config) #hostname jarkom
jarkom(config) #interface fa0/0
jarkom(config-if) #ip address 172.16.0.1 255.255.255.0
jarkom(config-if) #no shutdown
jarkom(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up
jarkom(config-if) #exit
jarkom(config)#interface fa1/0
jarkom(config-if) #ip address 172.15.0.1 255.255.255.0
jarkom(config-if) #no shutdown
jarkom(config-if)#
%LINK-5-CHANGED: Interface FastEthernet1/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/0, changed state to up
jarkom(config-if) #exit
jarkom(config)#
```

- Konfigurasi Router 2

```
Router>en
Router#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Router(config) #hostname SistemInformasi
SistemInformasi(config) #interface fa0/0
SistemInformasi(config-if) #ip address 172.17.0.1 255.255.255.0
SistemInformasi(config-if) #no shutdown
SistemInformasi(config-if) #
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up
SistemInformasi(config-if) #exit
SistemInformasi(config) #interface fa1/0
SistemInformasi(config-if) #ip address 172.15.0.2 255.255.255.0
SistemInformasi(config-if) #no shutdown
SistemInformasi(config-if)#
%LINK-5-CHANGED: Interface FastEthernet1/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/0, changed state to up
SistemInformasi(config-if) #exit
SistemInformasi(config)#
```

- Konfigurasi Router 3

```
Router>en
Router#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Router(config) #hostname RPL
RPL(config) #interface fa0/0
RPL(config-if) #ip address 172.18.0.1 255.255.255.0
RPL(config-if) #no shutdown
RPL(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up
RPL(config-if) #exit
RPL(config) #interface fa1/0
RPL(config-if) #ip address 172.15.0.3 255.255.255.0
RPL(config-if) #no shutdown
RPL(config-if)#
%LINK-5-CHANGED: Interface FastEthernet1/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/0, changed state to up
RPL(config-if) #exit
RPL(config)#
```

- Konfigurasi Router 4

```
Router>en
Router#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Router(config) #hostname UMS
UMS(config) #interface fa0/0
UMS(config-if) #ip address 172.19.0.1 255.255.255.0
UMS(config-if) #no shutdown
UMS(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up
UMS(config-if)#exit
UMS(config) #interface fa1/0
UMS(config-if) #ip address 172.15.0.4 255.255.255.0
UMS(config-if) #no shutdown
%LINK-5-CHANGED: Interface FastEthernet1/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/0, changed state to up
UMS(config-if) #exit
UMS(config)#
```

3. Konfigurasi Routing Table

- Membuat Routing Table pada Router 1/Jarkom

```
jarkom(config) #router rip
jarkom(config-router) #network 172.15.0.0
jarkom(config-router) #network 172.16.0.0
jarkom(config-router) #network 172.17.0.0
jarkom(config-router) #network 172.18.0.0
jarkom(config-router) #network 172.19.0.0
jarkom(config-router) #
```

- Membuat Routing Table pada Router 2/SI

```
SistemInformasi(config) #router rip
SistemInformasi(config-router) #network 172.15.0.0
SistemInformasi(config-router) #network 172.16.0.0
SistemInformasi(config-router) #network 172.17.0.0
SistemInformasi(config-router) #network 172.18.0.0
SistemInformasi(config-router) #network 172.19.0.0
SistemInformasi(config-router) #network 172.19.0.0
SistemInformasi(config-router) #exit
SistemInformasi(config) #
```

- Membuat Routing Table pada Router 3/RPL

```
RPL(config) #router rip

RPL(config-router) #network 172.15.0.0

RPL(config-router) #network 172.16.0.0

RPL(config-router) #network 172.17.0.0

RPL(config-router) #network 172.18.0.0

RPL(config-router) #network 172.19.0.0

RPL(config-router) #network 172.19.0.0

RPL(config-router) #exit

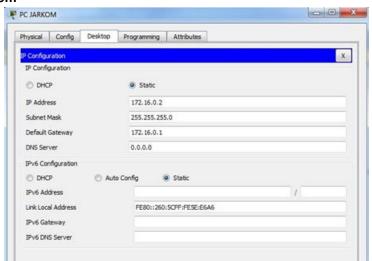
RPL(config) #
```

- Membuat Routing Table pada Router 4/gateway

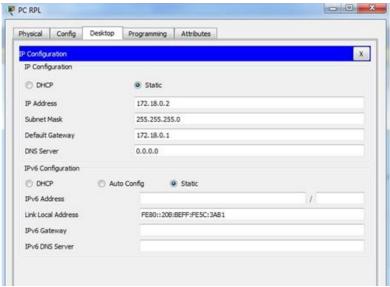
```
UMS(config) #router rip
UMS(config-router) #network 172.15.0.0
UMS(config-router) #network 172.16.0.0
UMS(config-router) #network 172.17.0.0
UMS(config-router) #network 172.18.0.0
UMS(config-router) #network 172.19.0.0
UMS(config-router) #network 172.19.0.0
UMS(config-router) #exit
UMS(config) #
```

4. Konfigurasi IP

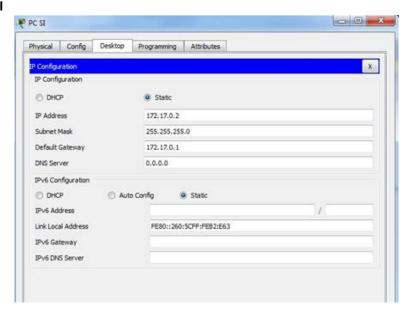
- Konfigurasi PC Jarkom



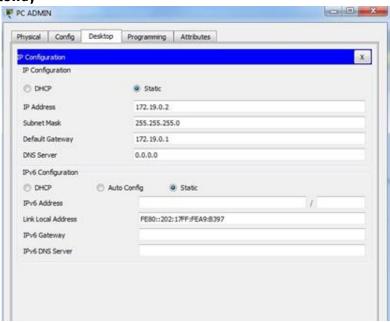
- Konfigurasi PC RPL



- Konfigurasi PC SI



- Konfigurasi PC Gateway



5. Pengujian ICMP request (ping) untuk test koneksi

```
Command Prompt
Pinging 172.16.0.2 with 32 bytes of data:
Reply from 172.16.0.2: bytes=32 time=1ms TTL=126
Reply from 172.16.0.2: bytes=32 time<1ms TTL=126
Reply from 172.16.0.2: bytes=32 time<1ms TTL=126
Reply from 172.16.0.2: bytes=32 time<1ms TTL=126
Ping statistics for 172.16.0.2:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss), Approximate round trip times in milli-seconds:
     Minimum = Oms, Maximum = 1ms, Average = Oms
C:\>ping 172.17.0.2
Pinging 172.17.0.2 with 32 bytes of data:
Reply from 172.17.0.2: bytes=32 time=1ms TTL=126 Reply from 172.17.0.2: bytes=32 time<1ms TTL=126 Reply from 172.17.0.2: bytes=32 time<1ms TTL=126 Reply from 172.17.0.2: bytes=32 time<1ms TTL=126
Ping statistics for 172.17.0.2:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
Minimum = 0ms, Maximum = 1ms, Average = 0ms
C:\>ping 172.18.0.2
Pinging 172.18.0.2 with 32 bytes of data:
Reply from 172.18.0.2: bytes=32 time=1ms TTL=126
Reply from 172.18.0.2: bytes=32 time=1ms TTL=126
Reply from 172.18.0.2: bytes=32 time<1ms TTL=126
Reply from 172.18.0.2: bytes=32 time<1ms TTL=126
Ping statistics for 172.18.0.2:
     Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
Minimum = 0ms, Maximum = 1ms, Average = 0ms
```