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KELAS : A

MODUL 11
PERANCANGAN JARINGAN LABORATORIUM SEDERHANA
MENGGUNAKAN PACKET TRACER

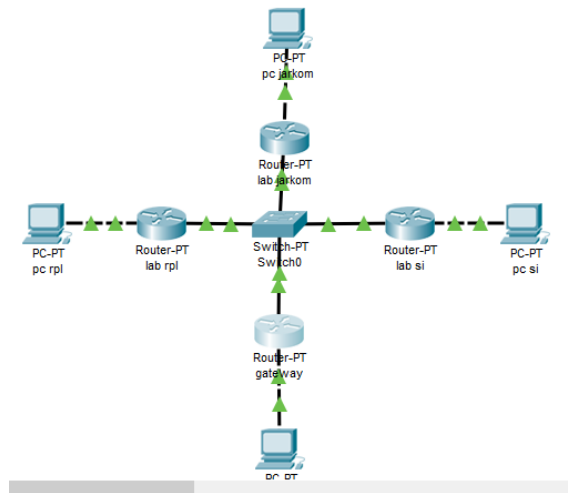
Analisis dan kebutuhan system :

1. Jaringan laboratorium digunakan untuk 3 ruangan yang terdiri dari Lab Jarkom, Lab RPL, Lab Sistem Informasi(SI)
2. Masing-masing tersebut menggunakan router dan subnet yang berbeda supaya broadcast jaringan terhadap 1 network tidak terlalu besar
3. Ketiga router terkoneksi ke gateway, menggunakan topologi star
4. Beri nama masing-masing router sesuai kebutuhan
5. Berikut ini alokasi alamat IP yang digunakan

No.	Nama Device	Interface	Alamat IP	Keterangan
1	Router Lab Jarkom	Ethernet 0	172.16.0.1/24	Ke PC Jarkom
		Ethernet 1	172.15.0.1/24	Ke 172.15.0.0
2	Router Lab RPL	Ethernet 0	172.18.0.1/24	Ke PC RPL
		Ethernet 1	172.15.0.3/24	Ke 172.15.0.0
3	Router Lab SI	Ethernet 0	172.17.0.1/24	Ke PC SI
		Ethernet 1	172.15.0.2/24	Ke 172.15.0.0
4	Router Gateway	Ethernet 0	172.19.0.1/24	Ke PC admin
		Ethernet 1	172.15.0.4/24	Ke 172.15.0.0
5	PC Jarkom	Ethernet 0	172.16.0.2/24	Ke Router Jarkom
6	PC RPL	Ethernet 0	172.18.0.2/24	Ke PC RPL
7	PC SI	Ethernet 0	172.17.0.2/24	Ke router SI
8	PC Gateway	Ethernet 0	172.19.0.2/24	Ke 172.15.0.0

Kegiatan Praktikum

1. Topologi dengan router 2541 yang memiliki 2 interface serial dan 2 ethernet. Untuk switch 1912.



2. Konfigurasi semua router
3. Konfigurasi routing table pada 4 router
 - a. Routing lab jarkom

The screenshot shows the CLI window for Router-PT lab jarkom. The window has tabs for Physical, Config, CLI, and Attributes. The CLI tab is active, showing the IOS Command Line Interface. The text in the CLI window is as follows:

```
Press RETURN to get started!

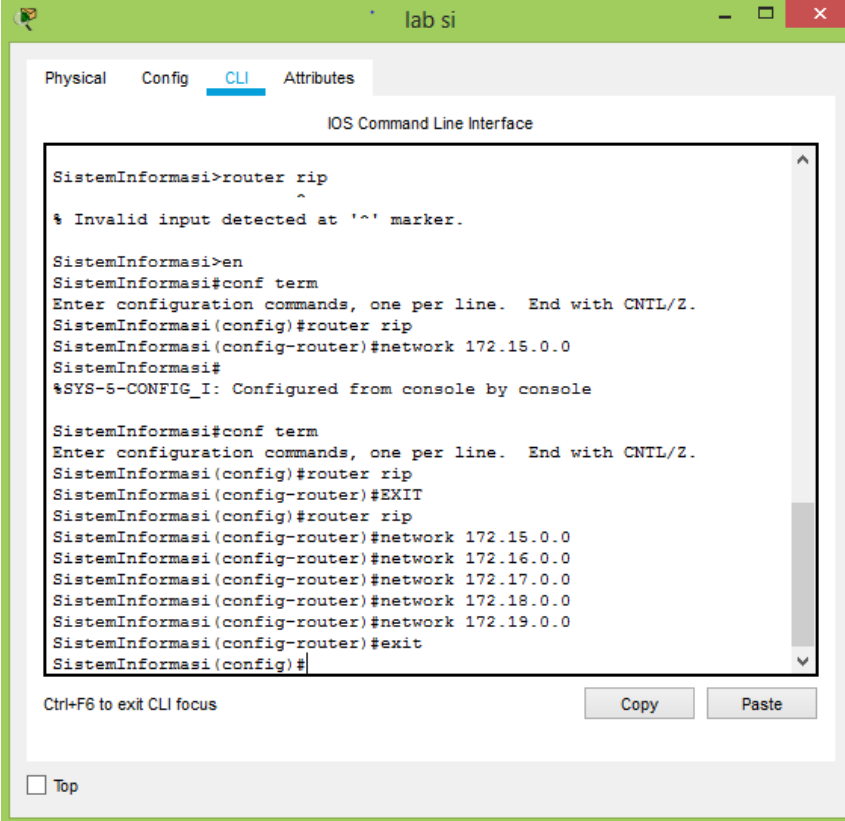
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0,
changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/0,
changed state to up

Jarkom>en
Jarkom#router rip
^
% Invalid input detected at '^' marker.

Jarkom#conf term
Enter configuration commands, one per line. End with CNTL/Z.
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)#exit
Jarkom(config)#s
```

At the bottom of the window, there are buttons for Copy and Paste, and a checkbox for Top.

b. Routing lab SI



```
SistemInformasi>router rip
^
% Invalid input detected at '^' marker.

SistemInformasi>en
SistemInformasi#conf term
Enter configuration commands, one per line. End with CNTL/Z.
SistemInformasi(config)#router rip
SistemInformasi(config-router)#network 172.15.0.0
SistemInformasi#
*SYS-5-CONFIG_I: Configured from console by console

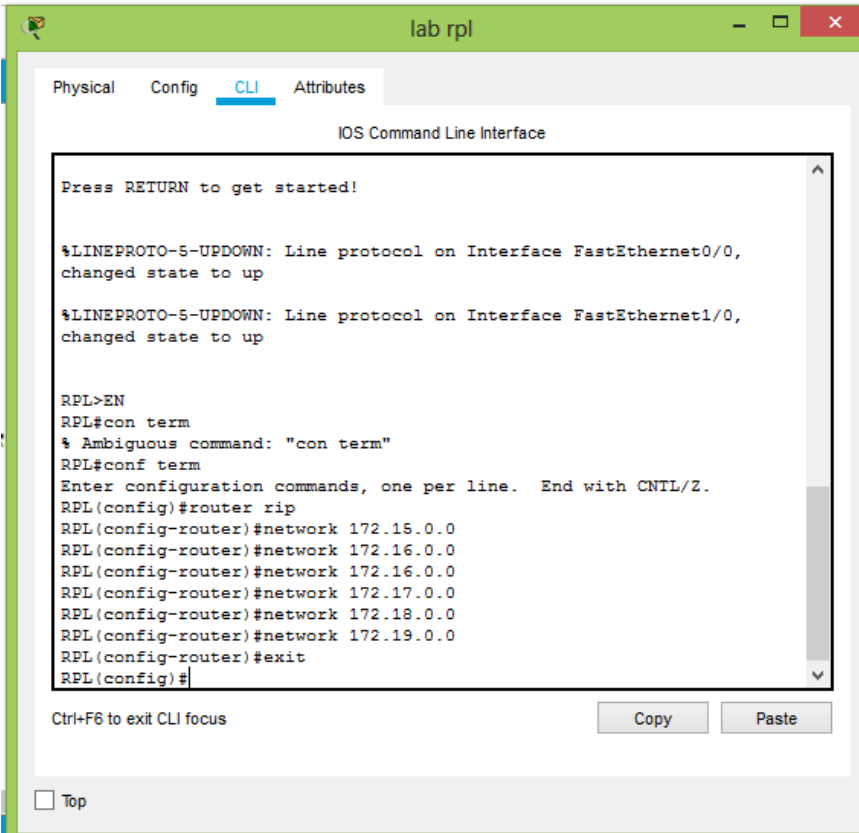
SistemInformasi#conf term
Enter configuration commands, one per line. End with CNTL/Z.
SistemInformasi(config)#router rip
SistemInformasi(config-router)#EXIT
SistemInformasi(config)#router rip
SistemInformasi(config-router)#network 172.15.0.0
SistemInformasi(config-router)#network 172.16.0.0
SistemInformasi(config-router)#network 172.17.0.0
SistemInformasi(config-router)#network 172.18.0.0
SistemInformasi(config-router)#network 172.19.0.0
SistemInformasi(config-router)#exit
SistemInformasi(config)#
```

Ctrl+F6 to exit CLI focus

Copy Paste

☐ Top

c. Routing lab RPL



```
Press RETURN to get started!

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0,
changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/0,
changed state to up

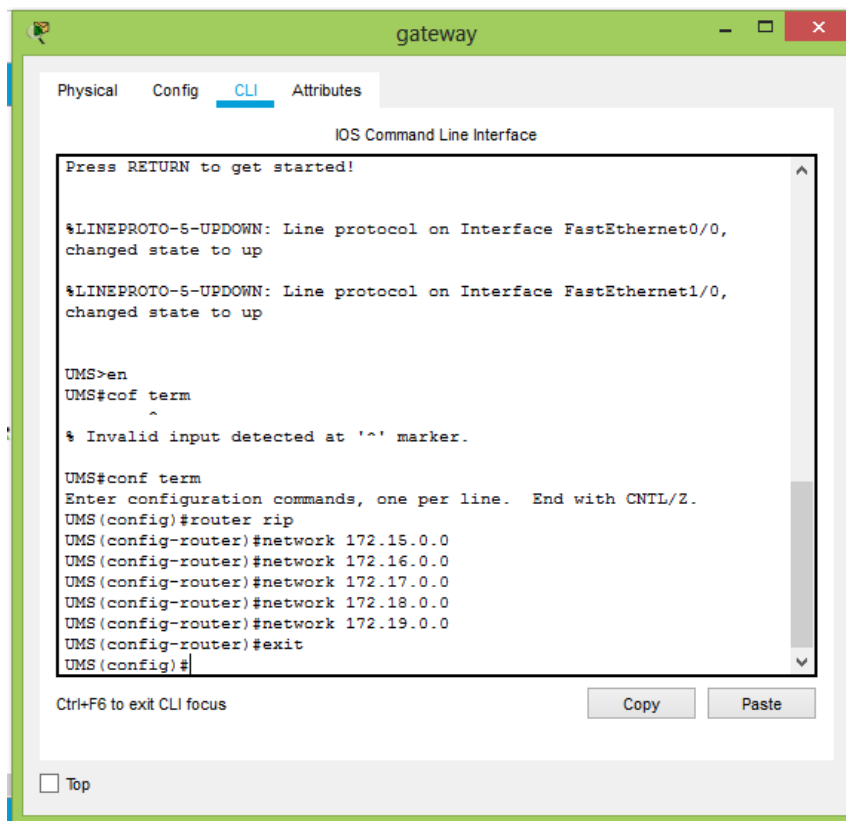
RPL>EN
RPL#con term
% Ambiguous command: "con term"
RPL#conf term
Enter configuration commands, one per line. End with CNTL/Z.
RPL(config)#router rip
RPL(config-router)#network 172.15.0.0
RPL(config-router)#network 172.16.0.0
RPL(config-router)#network 172.16.0.0
RPL(config-router)#network 172.17.0.0
RPL(config-router)#network 172.18.0.0
RPL(config-router)#network 172.19.0.0
RPL(config-router)#exit
RPL(config)#
```

Ctrl+F6 to exit CLI focus

Copy Paste

☐ Top

d. Routing gateway UMS



4. Konfigurasi IP pada PC

Cara mengkonfigurasi adalah masuk ke command prompt salah satu PC kemudian ketikkan perintah ping. Akan muncul GUI untuk mengkonfigurasi alamat IP.

