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KELAS : A

MODUL 11
PERANCANGAN JARINGAN LABORATORIUM SEDERHANA
MENGGUNAKAN PACKET TRACER

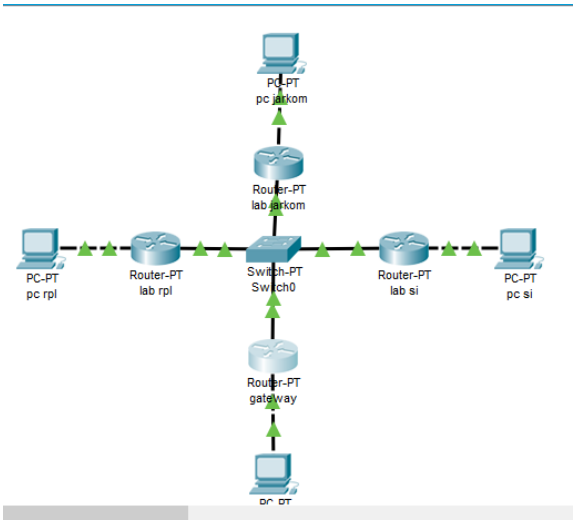
Analisis dan kebutuhan system :

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

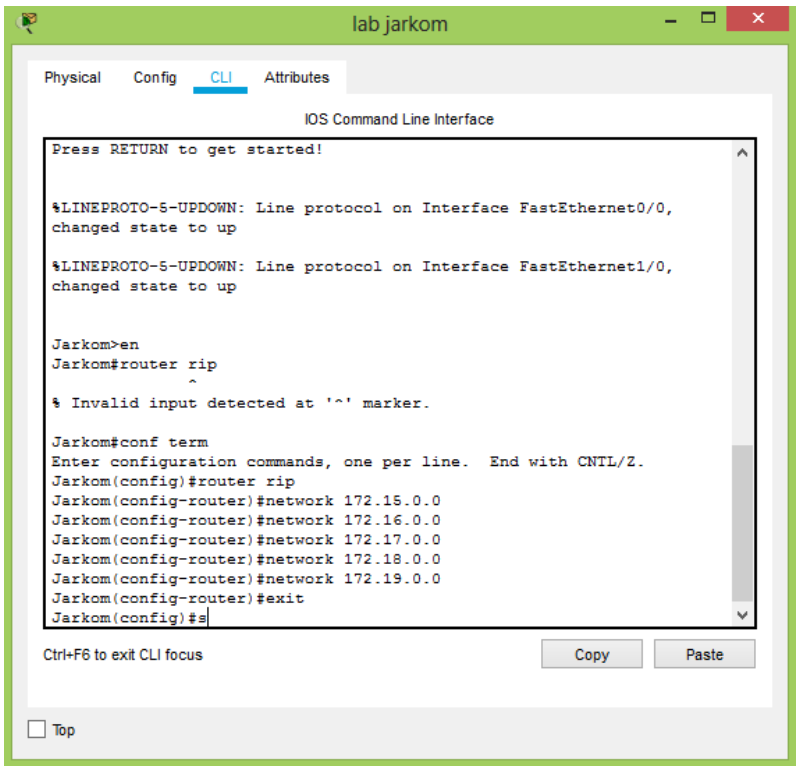
No.	Nama Device	Interface	Alamat IP	Keterangan
1	Router Lab Jarkom	Ethernet 0	172.16.0.1/24	Ke PC Jarkom
		Ethernet 1	172.15.0.1/24	Ke 172.15.0.0
2	Router Lab RPL	Ethernet 0	172.18.0.1/24	Ke PC RPL
		Ethernet 1	172.15.0.3/24	Ke 172.15.0.0
3	Router Lab SI	Ethernet 0	172.17.0.1/24	Ke PC SI
		Ethernet 1	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

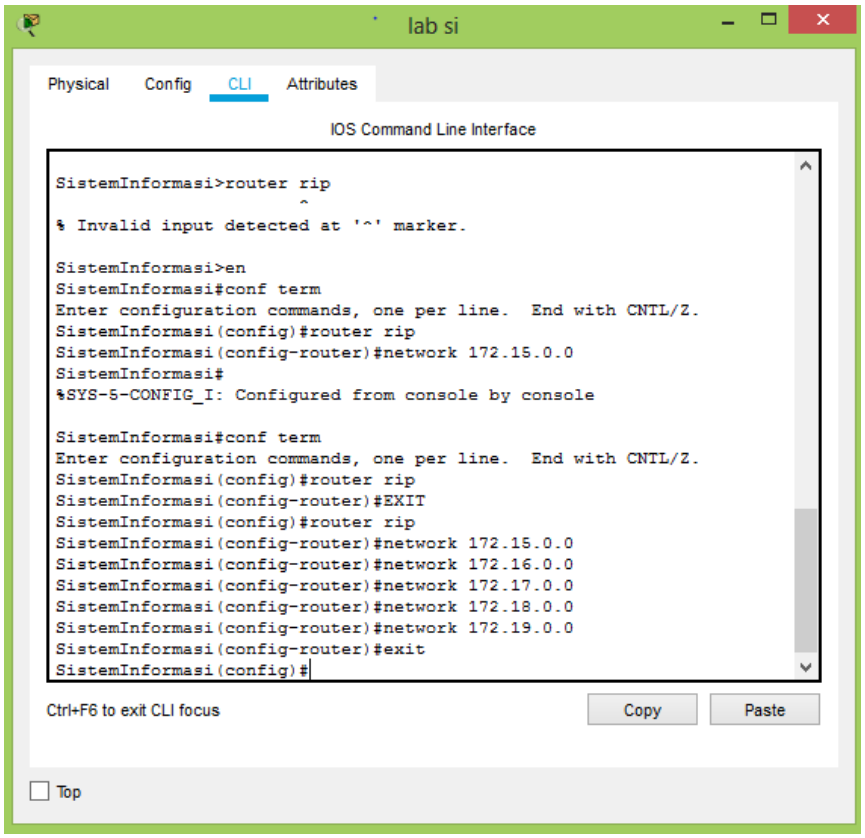
1. Topologi dengan router 2541 yang memiliki 2 interface serial dan 2 ethernet. Untuk switch 1912.



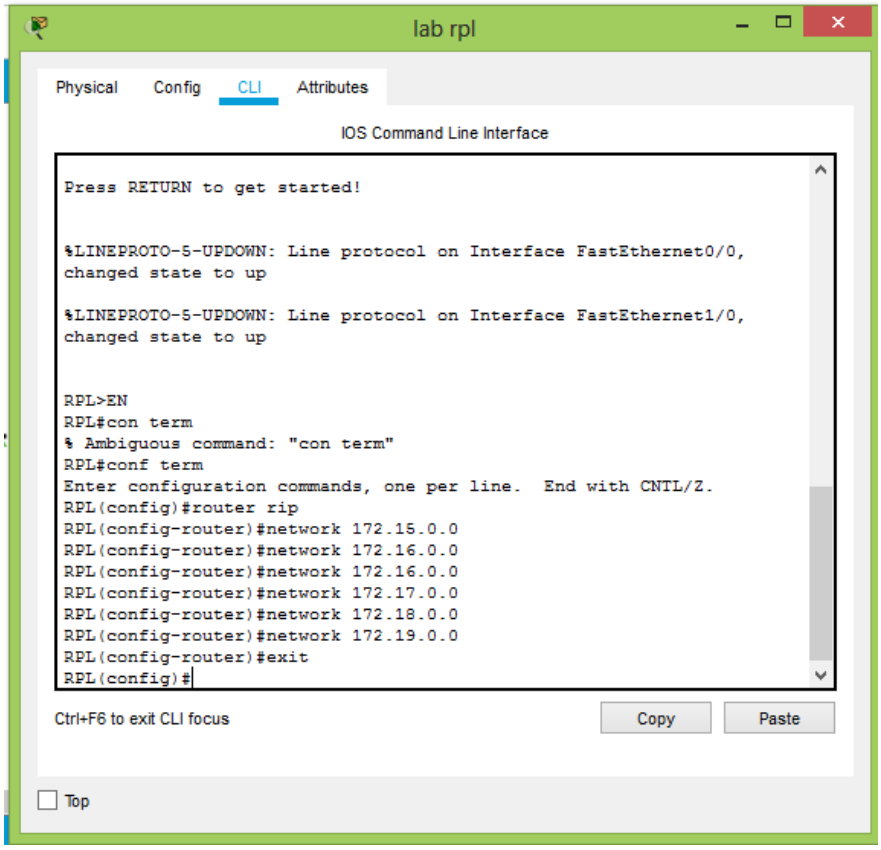
2. Konfigurasi semua router
3. Konfigurasi routing table pada 4 router
   a. Routing lab jarkom



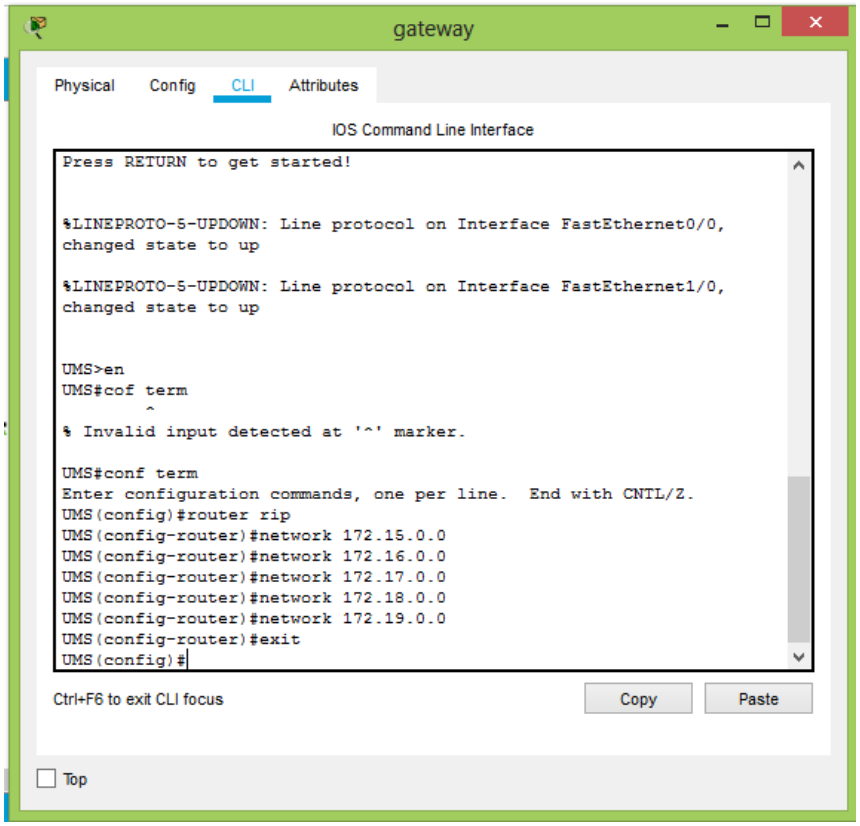
b. Routing lab SI



c. Routing lab RPL

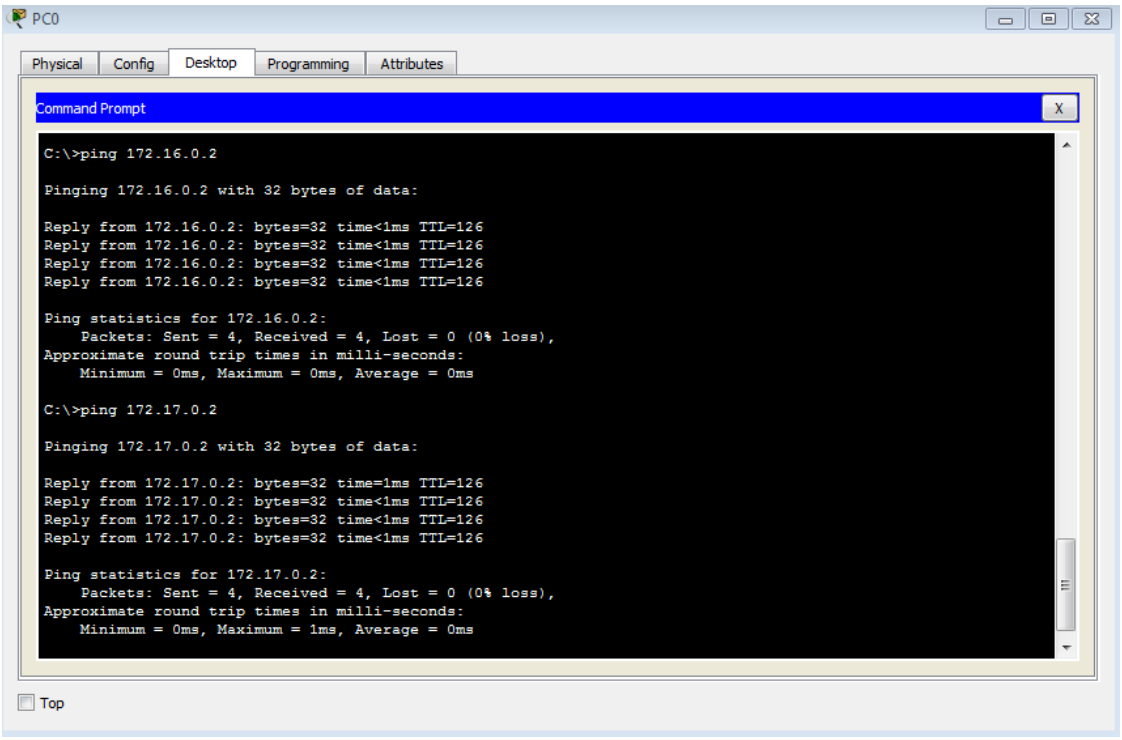


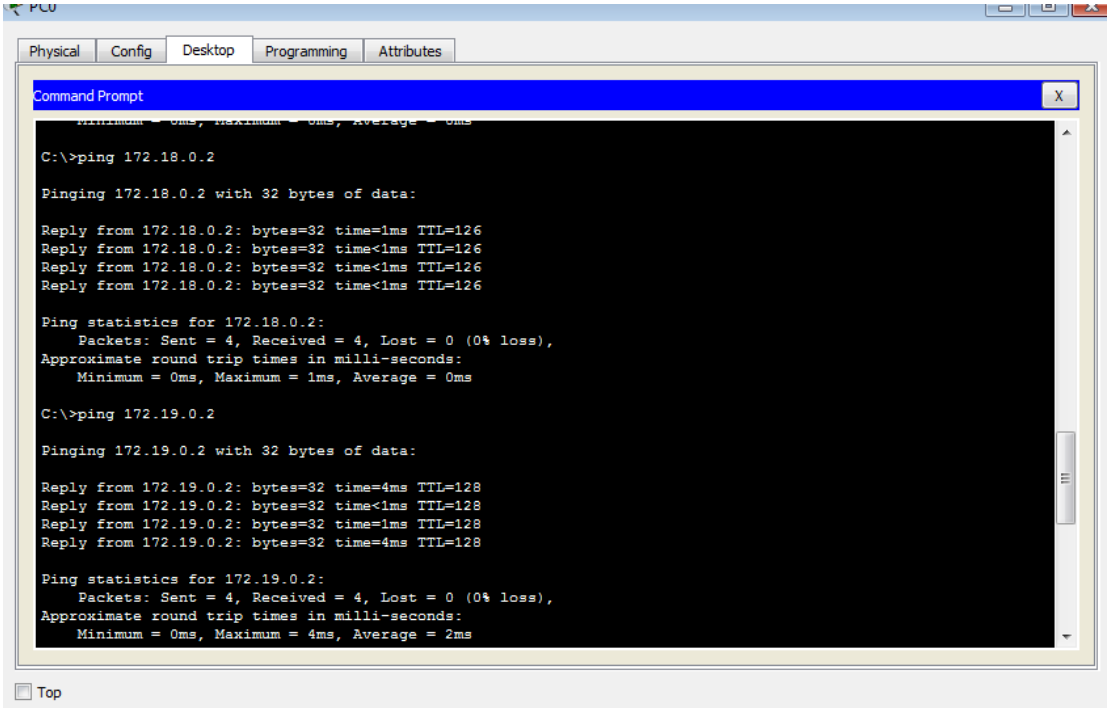
d. Routing gateway UMS

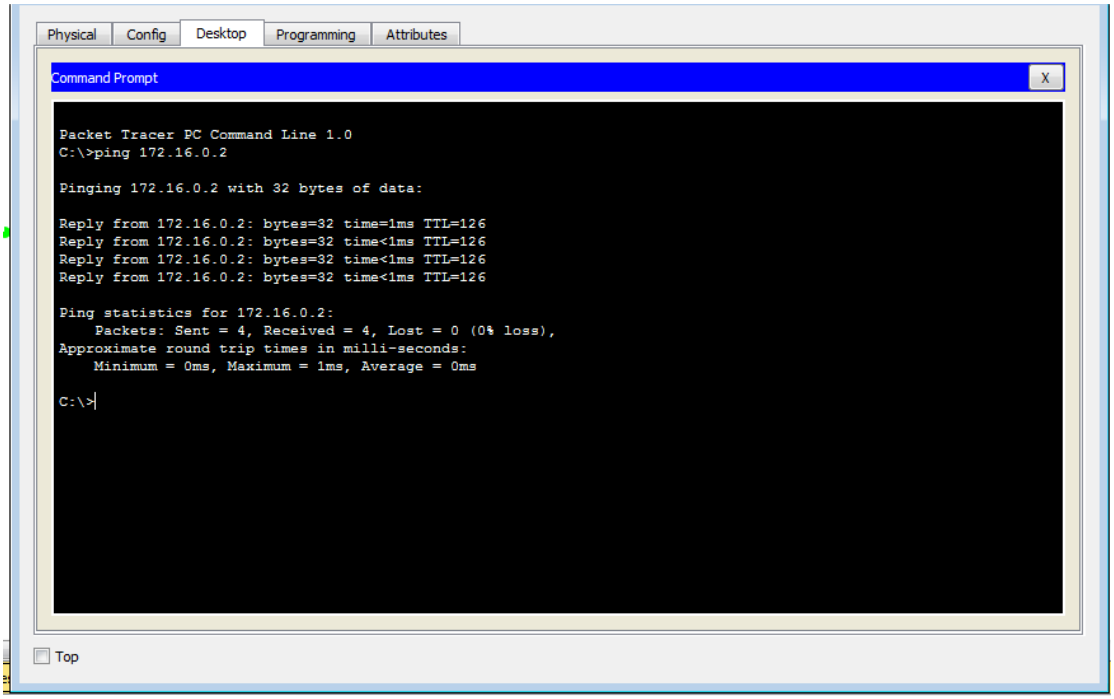


4. Konfigurasi IP pada PC

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




PC0
Physical
Config
Desktop
Programming
Attributes
Command Prompt
X
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
C:\>ping 172.19.0.2
Pinging 172.19.0.2 with 32 bytes of data:
Reply from 172.19.0.2: bytes=32 time=4ms TTL=128
Reply from 172.19.0.2: bytes=32 time<1ms TTL=128
Reply from 172.19.0.2: bytes=32 time=1ms TTL=128
Reply from 172.19.0.2: bytes=32 time=4ms TTL=128
Ping statistics for 172.19.0.2:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
Minimum = 0ms, Maximum = 4ms, Average = 2ms
Top


Physical
Config
Desktop
Programming
Attributes
Command Prompt
X
Packet Tracer PC Command Line 1.0
C:\>ping 172.16.0.2
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 = 0ms, Maximum = 1ms, Average = 0ms
C:\>
Top