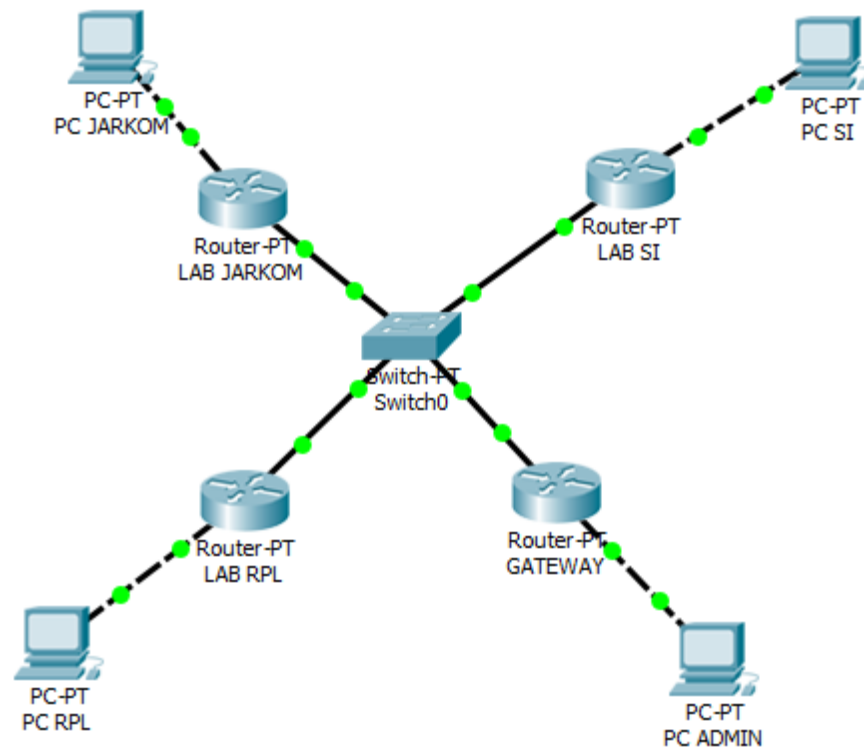


**NAMA** : PUJI NUGROHO  
**NIM** : L200170123  
**KELAS** : C  
**MODUL** : 11

## KEGIATAN

### 1. Desain Jaringan



### 2. Konfigurasi router Jarkom

```
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 172.16.0.1 255.255.255.255
Bad mask /32 for address 172.16.0.1
Router(config-if)#ip address 172.16.0.1 255.255.255.0
Router(config-if)#no shutdown

Router(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

Router(config-if)#int fa 0/1
%Invalid interface type and number
Router(config)#int fa 1/0
Router(config-if)#ip address 172.15.0.1 255.255.255.0
Router(config-if)#no shutdown

Router(config-if)#
%LINK-5-CHANGED: Interface FastEthernet1/0, changed state to up

Router(config-if)#exit
Router(config)#hostname jarkom
jarkom(config)#
```

### 3. Konfigurasi router RPL

```
Router>enable
Router#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#hostname rpl
rpl(config)#int fa 0/0
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)#int fa 1/0
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

rpl(config-if)#
```

### 4. Konfigurasi router SI

```
si(config)#int fa 0/0
si(config-if)#ip address 172.17.0.1 255.255.255.0
si(config-if)#no shutdown

si(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

si(config-if)#int fa 1/0
si(config-if)#ip address 172.15.0.2 255.255.255.0
si(config-if)#no shutdown

si(config-if)#
%LINK-5-CHANGED: Interface FastEthernet1/0, changed state to up

si(config-if)#
```

Ctrl+F6 to exit CLI focus

Copy

Paste

☐ Top

### 5. Konfigurasi router Gateway

```
Router>enable
Router#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#hostname ums
ums(config)#int fa 0/0
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

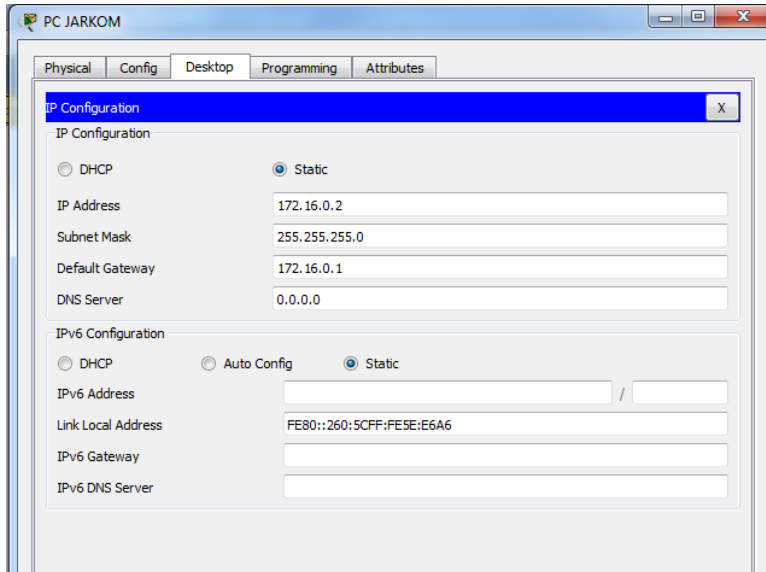
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed
state to up

ums(config-if)#int fa 1/0
ums(config-if)#ip address 172.15.0.4 255.255.255.0
ums(config-if)#no shutdown

ums(config-if)#
%LINK-5-CHANGED: Interface FastEthernet1/0, changed state to up

ums(config-if)#
```

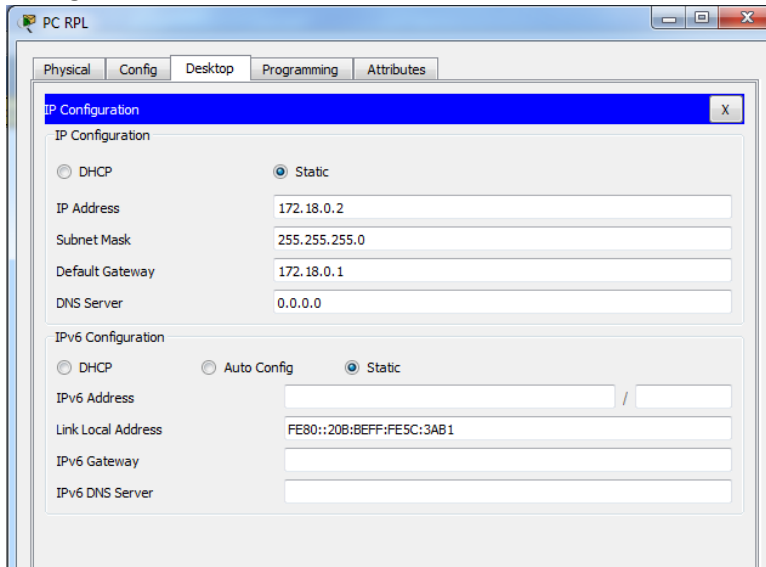
## 6. Konfigurasi PC



The screenshot shows the 'PC JARKOM' configuration window with the 'Config' tab selected. The 'IP Configuration' sub-window is open, showing settings for both IPv4 and IPv6. The IPv4 configuration is set to 'Static' with an IP address of 172.16.0.2, subnet mask of 255.255.255.0, default gateway of 172.16.0.1, and DNS server of 0.0.0.0. The IPv6 configuration is also set to 'Static' with a link local address of FE80::260:5CFF:FE5E:E6A6.

Field	Value
IP Address	172.16.0.2
Subnet Mask	255.255.255.0
Default Gateway	172.16.0.1
DNS Server	0.0.0.0
IPv6 Address	
Link Local Address	FE80::260:5CFF:FE5E:E6A6
IPv6 Gateway	
IPv6 DNS Server	

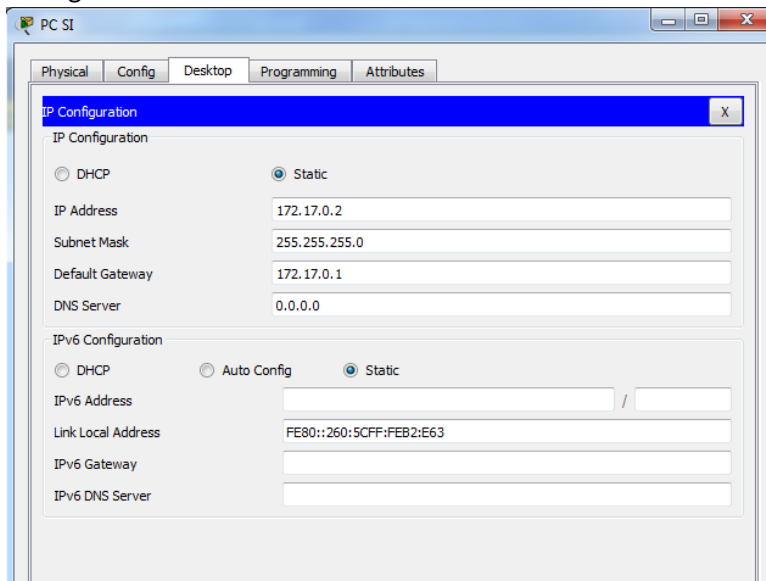
## 7. Konfigurasi PC RPL



The screenshot shows the 'PC RPL' configuration window with the 'Config' tab selected. The 'IP Configuration' sub-window is open, showing settings for both IPv4 and IPv6. The IPv4 configuration is set to 'Static' with an IP address of 172.18.0.2, subnet mask of 255.255.255.0, default gateway of 172.18.0.1, and DNS server of 0.0.0.0. The IPv6 configuration is also set to 'Static' with a link local address of FE80::208:BEFF:FE5C:3AB1.

Field	Value
IP Address	172.18.0.2
Subnet Mask	255.255.255.0
Default Gateway	172.18.0.1
DNS Server	0.0.0.0
IPv6 Address	
Link Local Address	FE80::208:BEFF:FE5C:3AB1
IPv6 Gateway	
IPv6 DNS Server	

## 8. Konfigurasi PC SI



The screenshot shows the 'PC SI' configuration window with the 'Config' tab selected. The 'IP Configuration' sub-window is open, showing settings for both IPv4 and IPv6. The IPv4 configuration is set to 'Static' with an IP address of 172.17.0.2, subnet mask of 255.255.255.0, default gateway of 172.17.0.1, and DNS server of 0.0.0.0. The IPv6 configuration is also set to 'Static' with a link local address of FE80::260:5CFF:FE82:E63.

Field	Value
IP Address	172.17.0.2
Subnet Mask	255.255.255.0
Default Gateway	172.17.0.1
DNS Server	0.0.0.0
IPv6 Address	
Link Local Address	FE80::260:5CFF:FE82:E63
IPv6 Gateway	
IPv6 DNS Server	

## 9. Konfigurasi PC Gateway

The screenshot shows the 'PC ADMIN' window with the 'Config' tab selected. The 'IP Configuration' section is active, showing the following settings:

- IP Configuration:**
  - ☐ DHCP
  - ☒ Static
  - IP Address: 172.19.0.2
  - Subnet Mask: 255.255.255.0
  - Default Gateway: 172.19.0.1
  - DNS Server: 0.0.0.0
- IPv6 Configuration:**
  - ☐ DHCP
  - ☐ Auto Config
  - ☒ Static
  - IPv6 Address: (empty field) / (empty field)
  - Link Local Address: FE80::202:17FF:FEA9:B397
  - IPv6 Gateway: (empty field)
  - IPv6 DNS Server: (empty field)

## 10. Melakukan peroutingan

The screenshot displays four terminal windows, each showing the configuration of a different router for RIPv2:

- jarkom:**

```
Router(config-if)#exit
Router(config)#hostname 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)#
```
- si:**

```
si(config-if)#exit
si(config)#router rip
si(config-router)#network 172.15.0.0
si(config-router)#network 172.16.0.0
si(config-router)#network 172.17.0.0
si(config-router)#network 172.18.0.0
si(config-router)#network 172.19.0.0
si(config-router)#
```
- rpl:**

```
rpl(config-if)#exit
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)#
```
- ums:**

```
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)#
```

11. Melakukan cek koneksi

