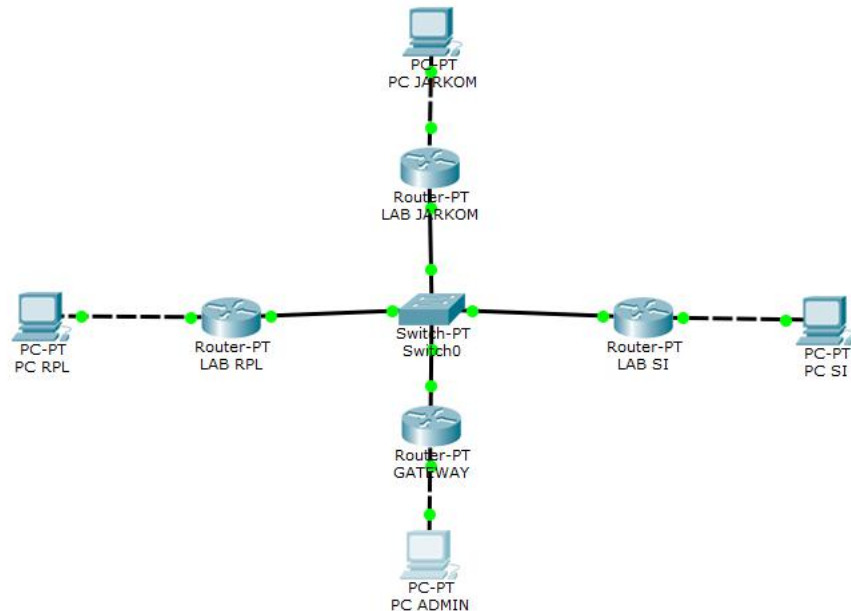


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Kelas C

## MODUL 11

1. Topologi dengan router 2514 yang memiliki 2 serial dan 2 ethernet, switch 1913



2. Konfigurasi pada router
- ### Konfigurasi Router 1

LAB JARKOM

```
Router>en
Router#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#hostname Jarkom
Jarkom(config)#int fa0/0
Jarkom(config-if)#ip add 172.16.0.1 255.255.255.0
Jarkom(config-if)#no shut

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)#int fa1/0
Jarkom(config-if)#ip add 172.15.0.1 255.255.255.0
Jarkom(config-if)#no shut

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
```

Copy Paste

☐ Top

## Konfigurasi Router 2

LAB SI

Physical Config CLI Attributes

IOS Command Line Interface

```
Router>en
Router#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#hostname SistemInformasi
SistemInformasi(config)#int fa0/0
SistemInformasi(config-if)#ip add 172.17.0.1 255.255.255.0
SistemInformasi(config-if)#no shut

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)#int fal/0
SistemInformasi(config-if)#ip add 172.15.0.2 255.255.255.0
SistemInformasi(config-if)#no shut

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
```

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☐ Top

## Konfigurasi Router 3

LAB RPL

Physical Config CLI Attributes

IOS Command Line Interface

```
Router>en
Router#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#hostname RPL
RPL(config)#int fa0/0
RPL(config-if)#ip add 172.18.0.1 255.255.255.0
RPL(config-if)#no shut

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)#int fal/0
RPL(config-if)#ip add 172.15.0.3 255.255.255.0
RPL(config-if)#no shut

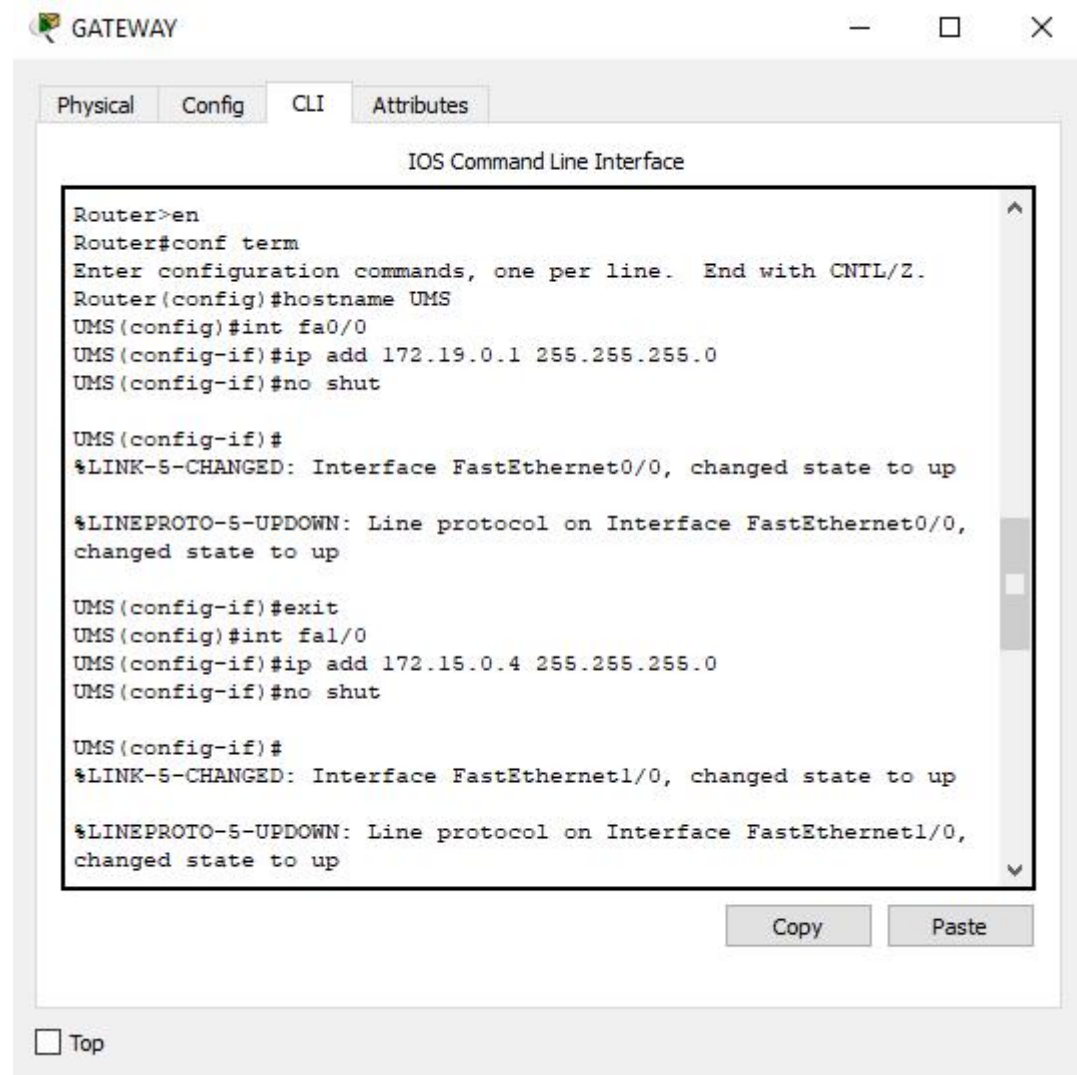
RPL(config-if)#
%LINK-5-CHANGED: Interface FastEthernet1/0, changed state to up

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

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☐ Top

## Konfigurasi Router 4



### 3. Konfigurasi Routing Table pada 4 Router

#### Membuat Routing Table pada router 1 / Jarkom

```
Jarkom(config-if)#exit
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-if)#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)#
```

### Membuat Routing Table pada router 3 / 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)#
```

### Membuat Routing Table pada router 4 / Gateway UMS

```
UMS(config-if)#exit
UMS(config)#router rip
UMS(config-router)#network 172.15.0.0
UMS(config-router)#network 172.1.0.0
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)#
```

## 4. Konfigurasi IP pada masing-masing PC

### Konfigurasi IP PC RPL

PC RPL

Physical Config Desktop Attributes Software/Services

**IP Configuration**

IP Configuration

☐ DHCP ☒ Static

IP Address: 172.18.0.2

Subnet Mask: 255.255.255.0

Default Gateway: 172.17.0.1

DNS Server:

IPv6 Configuration

☐ DHCP ☐ Auto Config ☒ Static

IPv6 Address: /

Link Local Address: FE80::2D0:58FF:FE88:193

IPv6 Gateway:

IPv6 DNS Server:

☐ Top

Activ

## Konfigurasi IP PC Jarkom

PC JARKOM

Physical Config Desktop Attributes Software/Services

IP Configuration

IP Configuration

☐ DHCP ☒ Static

IP Address 172.16.0.2

Subnet Mask 255.255.255.0

Default Gateway 172.16.0.1

DNS Server

IPv6 Configuration

☐ DHCP ☐ Auto Config ☒ Static

IPv6 Address /

Link Local Address FE80::209:7CFF:FE95:5507

IPv6 Gateway

IPv6 DNS Server

Top

## Konfigurasi IP PC SI

PC SI

Physical Config Desktop Attributes Software/Services

IP Configuration

IP Configuration

☐ DHCP ☒ Static

IP Address 172.17.0.2

Subnet Mask 255.255.255.0

Default Gateway 172.18.0.1

DNS Server

IPv6 Configuration

☐ DHCP ☐ Auto Config ☒ Static

IPv6 Address /

Link Local Address FE80::2E0:A3FF:FE83:ABE0

IPv6 Gateway

IPv6 DNS Server

Top



## Konfigurasi IP PC Gateway

The screenshot shows the PC Admin software interface with the 'Config' tab selected. The 'IP Configuration' window is open, 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: (empty)
- IPv6 Configuration:**
  - ☐ DHCP
  - ☐ Auto Config
  - ☒ Static
  - IPv6 Address: (empty) / (empty)
  - Link Local Address: FE80::201:96FF:FE1E:6A4C
  - IPv6 Gateway: (empty)
  - IPv6 DNS Server: (empty)

At the bottom left, there is a 'Top' button.

5. Login ke PC Admin dengan alamat 172.19.0.2 dan ping ke PC Jarkom, PC RPL, dan PC SI.

### Ping dari PC Admin ke PC Jarkom

```
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=13ms TTL=126
Reply from 172.16.0.2: bytes=32 time=1ms TTL=126
Reply from 172.16.0.2: bytes=32 time=12ms 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 = 1ms, Maximum = 13ms, Average = 6ms
```

### Ping dari PC Admin ke PC SI

```
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=2ms 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 = 2ms, Average = 0ms
```

## Ping dari PC Admin ke PC SI

```
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=10ms TTL=126
Reply from 172.18.0.2: bytes=32 time<1ms TTL=126
Reply from 172.18.0.2: bytes=32 time=14ms 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 = 14ms, Average = 6ms
```