

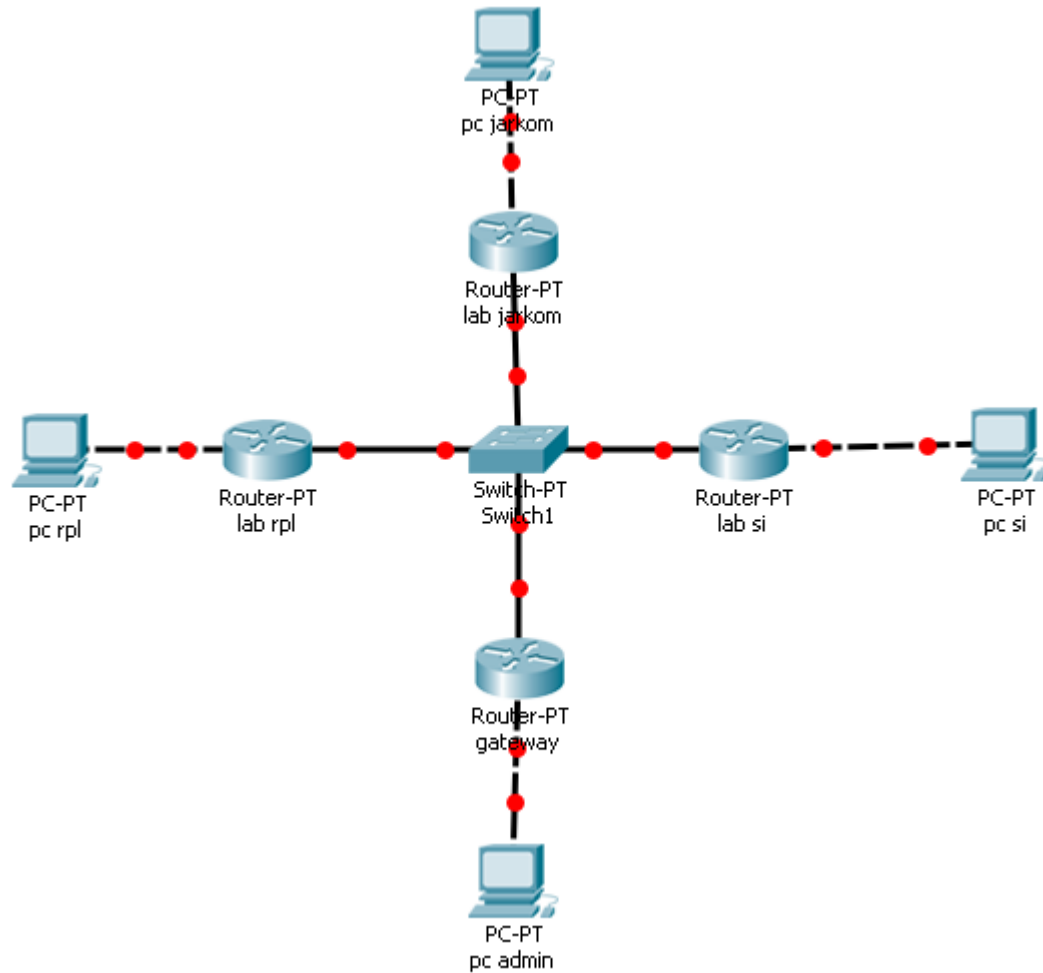
Nama : Muhammad Himmawan

Nim : L200170161

Kelas : D – Prak.JarKom

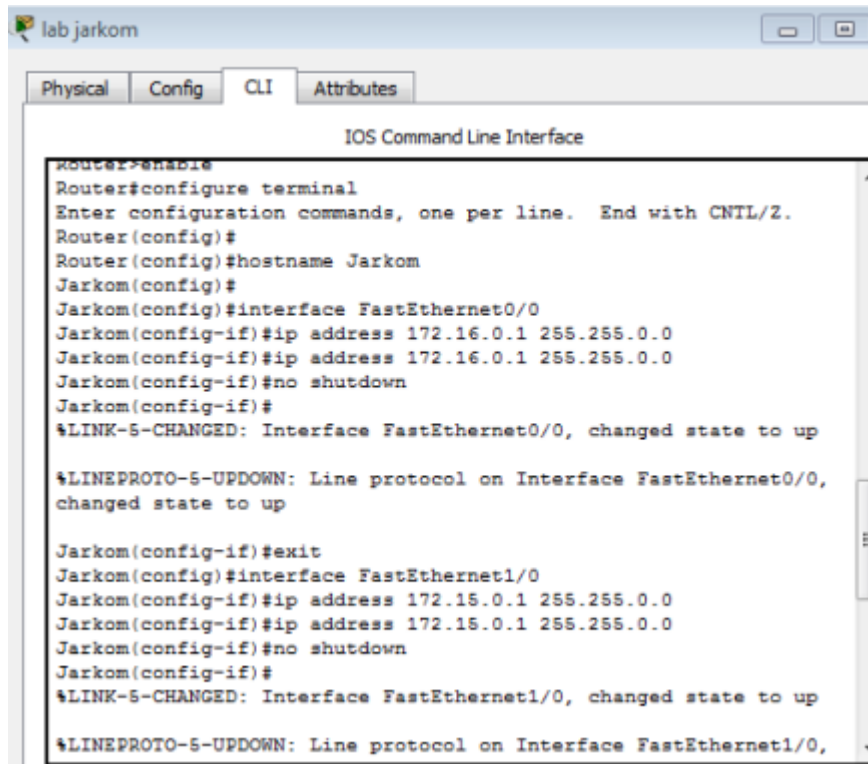
Modul 11

1. Buat struktuk Topologi



2. Setting IP di tiap-tiap Router

a) Lab JarKom



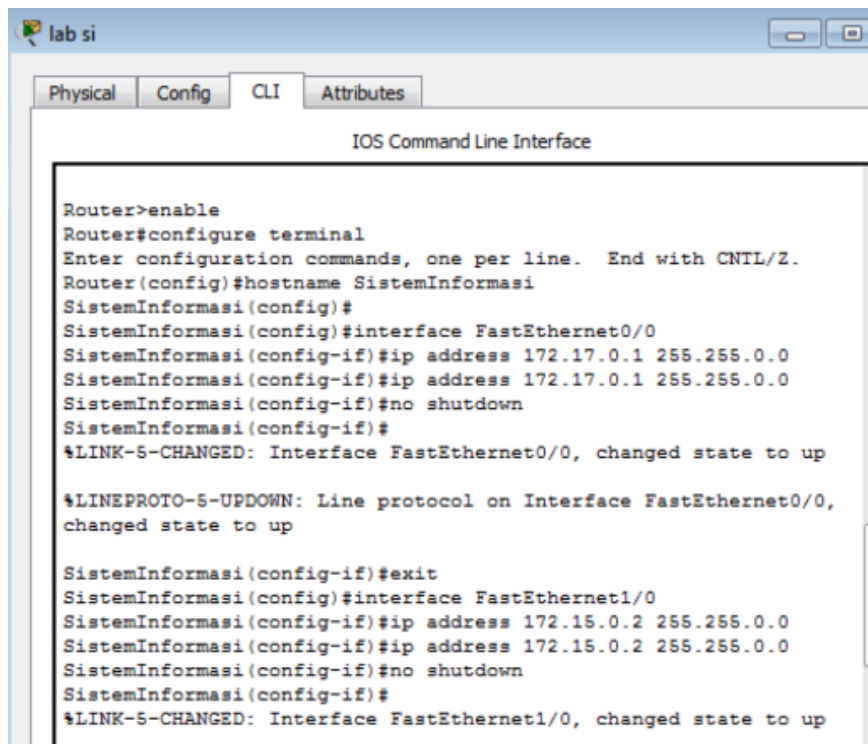
```
lab jarkom
Physical Config CLI Attributes
IOS Command Line Interface
Router>enable
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#
Router(config)#hostname Jarkom
Jarkom(config)#
Jarkom(config)#interface FastEthernet0/0
Jarkom(config-if)#ip address 172.16.0.1 255.255.0.0
Jarkom(config-if)#ip address 172.16.0.1 255.255.0.0
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 FastEthernet1/0
Jarkom(config-if)#ip address 172.15.0.1 255.255.0.0
Jarkom(config-if)#ip address 172.15.0.1 255.255.0.0
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,
```

b) Lab SI

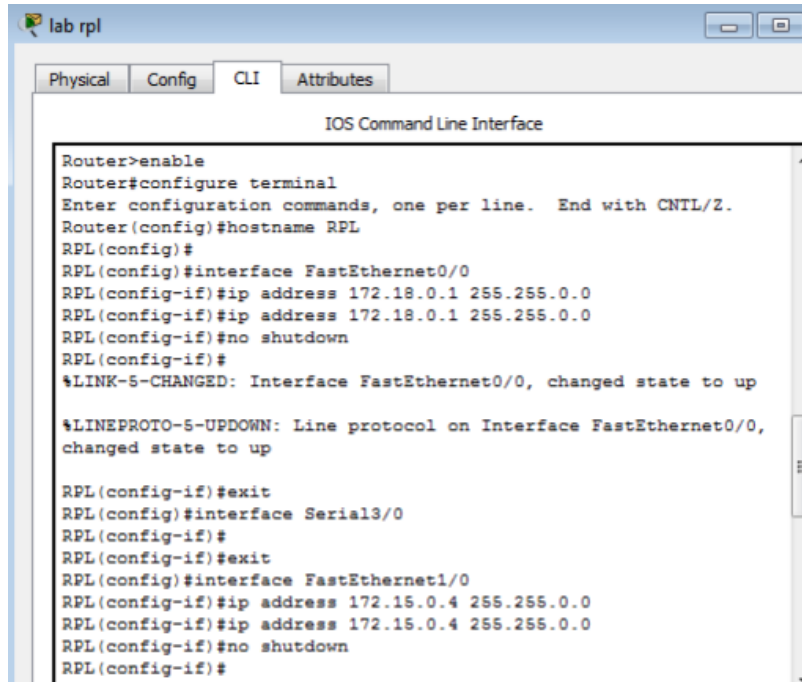


```
lab si
Physical Config CLI Attributes
IOS Command Line Interface
Router>enable
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#hostname SistemInformasi
SistemInformasi(config)#
SistemInformasi(config)#interface FastEthernet0/0
SistemInformasi(config-if)#ip address 172.17.0.1 255.255.0.0
SistemInformasi(config-if)#ip address 172.17.0.1 255.255.0.0
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 FastEthernet1/0
SistemInformasi(config-if)#ip address 172.15.0.2 255.255.0.0
SistemInformasi(config-if)#ip address 172.15.0.2 255.255.0.0
SistemInformasi(config-if)#no shutdown
SistemInformasi(config-if)#
%LINK-5-CHANGED: Interface FastEthernet1/0, changed state to up
```

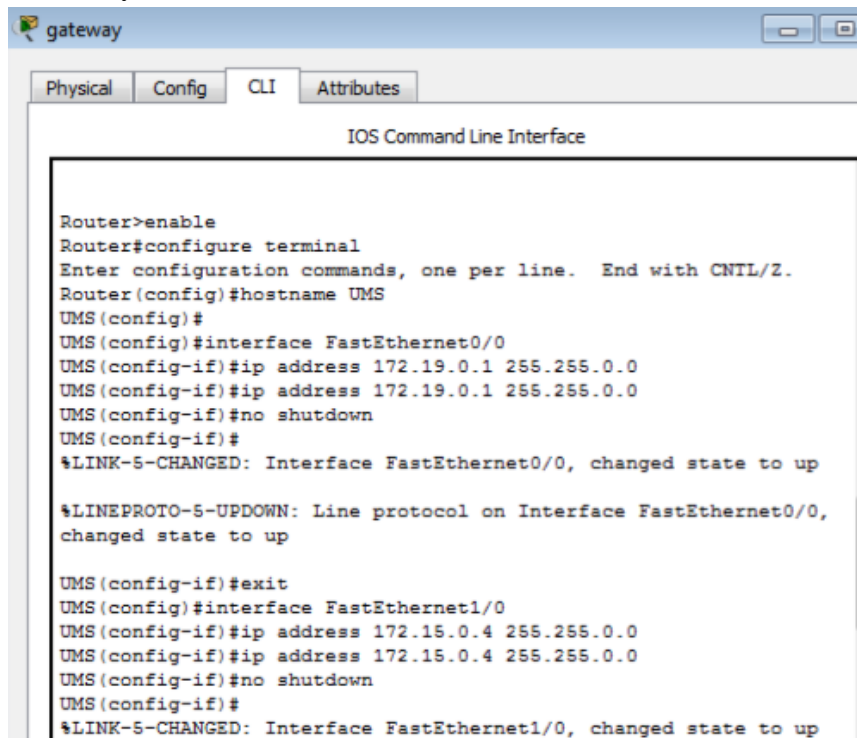
c) Lab RPL



The screenshot shows a window titled 'lab rpl' with tabs for Physical, Config, CLI, and Attributes. The CLI tab is active, displaying the IOS Command Line Interface. The configuration process is as follows:

```
Router>enable
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#hostname RPL
RPL(config)#
RPL(config)#interface FastEthernet0/0
RPL(config-if)#ip address 172.18.0.1 255.255.0.0
RPL(config-if)#ip address 172.18.0.1 255.255.0.0
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 Serial3/0
RPL(config-if)#
RPL(config-if)#exit
RPL(config)#interface FastEthernet1/0
RPL(config-if)#ip address 172.15.0.4 255.255.0.0
RPL(config-if)#ip address 172.15.0.4 255.255.0.0
RPL(config-if)#no shutdown
RPL(config-if)#
RPL(config-if)#
```

d) Gateway



The screenshot shows a window titled 'gateway' with tabs for Physical, Config, CLI, and Attributes. The CLI tab is active, displaying the IOS Command Line Interface. The configuration process is as follows:

```
Router>enable
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#hostname UMS
UMS(config)#
UMS(config)#interface FastEthernet0/0
UMS(config-if)#ip address 172.19.0.1 255.255.0.0
UMS(config-if)#ip address 172.19.0.1 255.255.0.0
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 FastEthernet1/0
UMS(config-if)#ip address 172.15.0.4 255.255.0.0
UMS(config-if)#ip address 172.15.0.4 255.255.0.0
UMS(config-if)#no shutdown
UMS(config-if)#
UMS(config-if)#
%LINK-5-CHANGED: Interface FastEthernet1/0, changed state to up
```

3. Konfigurasi routing table

a) Lab JarKom

```
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)#
Jarkom(config-router)#end
Jarkom#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Jarkom(config)#interface FastEthernet1/0
Jarkom(config-if)#
%SYS-5-CONFIG_I: Configured from console by console
```

b) Lab SI

```
SistemInformasi(config-if)#ex
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)#ex
```

c) Lab RPL

```
RPL(config-if)#ex
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)#ex
RPL(config)#
RPL#
%SYS-5-CONFIG_I: Configured from console by console
```

d) Gateway

```
UMS(config-if)#ex
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)#ex
UMS(config)#
UMS#
%SYS-5-CONFIG_I: Configured from console by console
```

4. Konfigurasi IP Address tiap-tiap PC

a) PC JarKom

pc jarkom

Physical Config Desktop Programming Attributes

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 0.0.0.0

IPv6 Configuration

☐ DHCP ☐ Auto Config ☒ Static

IPv6 Address /

Link Local Address FE80::290:2BFF:FE00:2760

IPv6 Gateway

IPv6 DNS Server

Top

b) PC SI

pc si

Physical Config Desktop Programming Attributes

IP Configuration

IP Configuration

☐ DHCP ☒ Static

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 Configuration

☐ DHCP ☐ Auto Config ☒ Static

IPv6 Address /

Link Local Address FE80::205:5EFF:FE68:BD9A

IPv6 Gateway

IPv6 DNS Server

Top

c) PC RPL

pc rpl

Physical Config Desktop Programming Attributes

IP Configuration

IP Configuration

☐ DHCP ☒ Static

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 Configuration

☐ DHCP ☐ Auto Config ☒ Static

IPv6 Address /

Link Local Address FE80::250:FFF:FED6:862C

IPv6 Gateway

IPv6 DNS Server

Top

d) PC Admin

pc admin

Physical Config Desktop Programming Attributes

IP Configuration

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 /

Link Local Address FE80::230:A3FF:FE42:E0D

IPv6 Gateway

IPv6 DNS Server

Top

5. Test PING tiap-tiap PC dari PC Admin

a) 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<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
```

b) 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<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) PC Admin ke PC RPL

```
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
```