

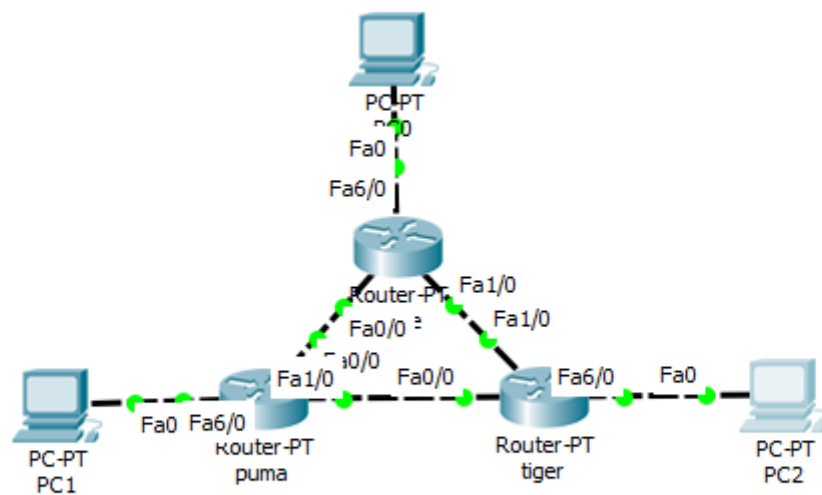
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MODUL 7

1. Buatlah topologi seperti pada gambar



2. Konfigurasi router dengan alamat IP :

❖ eagle

The screenshot shows the 'eagle' network simulator window. The 'Config' tab is active, and the 'FastEthernet0/0' interface is selected in the left sidebar. The configuration panel on the right shows the following settings:

- Port Status: ☒ On
- Bandwidth: ☒ 100 Mbps, ☐ 10 Mbps, ☒ Auto
- Duplex: ☒ Half Duplex, ☐ Full Duplex, ☒ Auto
- MAC Address: 000C.CF95.A23C
- IP Configuration:
 - IP Address: 172.21.10.10
 - Subnet Mask: 255.255.255.0
- Tx Ring Limit: 10

Below the configuration panel, the 'Equivalent IOS Commands' section displays the following commands:

```
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
```

A 'Top' button is located at the bottom left of the window.

The screenshot shows the 'eagle' network simulator window. The 'Config' tab is active, and the 'Serial3/0' interface is selected in the left sidebar. The configuration panel on the right shows the following settings:

- Port Status: ☒ On
- Duplex: ☒ Full Duplex
- Clock Rate: 2000000
- IP Configuration:
 - IP Address: 172.21.2.1
 - Subnet Mask: 255.255.255.0
- Tx Ring Limit: 10

Below the configuration panel, the 'Equivalent IOS Commands' section displays the following commands:

```
Router(config-if)#exit
Router(config)#interface Serial2/0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface Serial3/0
Router(config-if)#
```

A 'Top' button is located at the bottom left of the window.

eagle

Physical

Config

CLI

Attributes

GLOBAL

Settings

Algorithm Settings

ROUTING

Static

RIP

INTERFACE

FastEthernet0/0

FastEthernet1/0

Serial2/0

Serial3/0

FastEthernet4/0

FastEthernet5/0

Serial2/0

Port Status

On

Duplex

Full Duplex

Clock Rate

2000000

IP Configuration

IP Address

172.21.1.1

Subnet Mask

255.255.255.0

Tx Ring Limit

10

Equivalent IOS Commands

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

Router(config-if)#exit

Router(config)#interface Serial2/0

Router(config-if)#

Top

eagle

Physical

Config

CLI

Attributes

IOS Command Line Interface

Press RETURN to get started.

Router>en

Router#conf term

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)# ip route 172.21.20.0 255.255.255.0 172.21.1.2

Router(config)# ip route 172.21.30.0 255.255.255.0 172.21.2.3

Router(config)#exit

Router#

%SYS-5-CONFIG_I: Configured from console by console

Ctrl+F6 to exit CLI focus

Copy

Paste

Top

❖ puma

puma

Physical **Config** CLI Attributes

GLOBAL

Settings

Algorithm Settings

ROUTING

Static

RIP

INTERFACE

FastEthernet0/0

FastEthernet1/0

Serial2/0

Serial3/0

FastEthernet4/0

FastEthernet5/0

FastEthernet0/0

Port Status ☒ On

Bandwidth ☐ 100 Mbps ☐ 10 Mbps ☒ Auto

Duplex ☐ Half Duplex ☒ Full Duplex ☒ Auto

MAC Address 000D.BD69.ACDA

IP Configuration

IP Address 172.21.20.20

Subnet Mask 255.255.255.0

Tx Ring Limit 10

Equivalent IOS Commands

```
Router(config)#interface FastEthernet0/0
Router(config-if)#ip address 172.21.20.20 255.255.255.0
Router(config-if)#ip address 172.21.20.20 255.255.255.0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface FastEthernet0/0
Router(config-if)#
```

☐ Top

puma

Physical **Config** CLI Attributes

GLOBAL

Settings

Algorithm Settings

ROUTING

Static

RIP

INTERFACE

FastEthernet0/0

FastEthernet1/0

Serial2/0

Serial3/0

FastEthernet4/0

FastEthernet5/0

Serial3/0

Port Status ☒ On

Duplex ☒ Full Duplex

Clock Rate 1200

IP Configuration

IP Address 172.21.3.2

Subnet Mask 255.255.255.0

Tx Ring Limit 10

Equivalent IOS Commands

```
Router(config-if)#
Router(config-if)#exit
Router(config)#interface Serial2/0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface Serial3/0
Router(config-if)#
```

☐ Top

puma

Physical **Config** CLI Attributes

GLOBAL

Settings

Algorithm Settings

ROUTING

Static

RIP

INTERFACE

FastEthernet0/0

FastEthernet1/0

Serial2/0

Serial3/0

FastEthernet4/0

FastEthernet5/0

Serial2/0

Port Status ☒ On

Duplex ☐ Full Duplex

Clock Rate 2000000

IP Configuration

IP Address 172.21.1.2

Subnet Mask 255.255.255.0

Tx Ring Limit 10

Equivalent IOS Commands

```
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface FastEthernet0/0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface Serial2/0
Router(config-if)#
```

☐ Top

puma

Physical Config **CLI** Attributes

IOS Command Line Interface

Press RETURN to get started.

```
Router>en
Router#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#ip route 172.21.10.0 255.255.255.0 172.21.1.1
Router(config)#ip route 172.21.30.0 255.255.255.0 172.21.3.3
Router(config)#exit
Router#
%SYS-5-CONFIG_I: Configured from console by console
```

Ctrl+F6 to exit CLI focus

Copy Paste

☐ Top

❖ tiger

The screenshot shows the 'tiger' network configuration window. The 'Config' tab is active. On the left, a tree view shows 'INTERFACE' > 'FastEthernet0/0' selected. The main panel displays configuration for 'FastEthernet0/0'. The 'Port Status' is 'On'. 'Bandwidth' is set to '100 Mbps'. 'Duplex' is set to 'Full Duplex'. 'MAC Address' is '0004.9AB2.D23B'. 'IP Configuration' shows 'IP Address' as '172.21.30.30' and 'Subnet Mask' as '255.255.255.0'. 'Tx Ring Limit' is '10'. Below the configuration, a text area shows 'Equivalent IOS Commands' for enabling the interface and configuring it. A 'Top' button is at the bottom left.

Physical **Config** CLI Attributes

GLOBAL

- Settings
- Algorithm Settings

ROUTING

- Static
- RIP

INTERFACE

- FastEthernet0/0**
- FastEthernet1/0
- Serial2/0
- Serial3/0
- FastEthernet4/0
- FastEthernet5/0

FastEthernet0/0

Port Status ☒ On

Bandwidth ☒ 100 Mbps ☐ 10 Mbps ☒ Auto

Duplex ☐ Half Duplex ☒ Full Duplex ☒ Auto

MAC Address 0004.9AB2.D23B

IP Configuration

IP Address 172.21.30.30

Subnet Mask 255.255.255.0

Tx Ring Limit 10

Equivalent IOS Commands

```
Router>enable
Router#
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface FastEthernet0/0
Router(config-if)#
```

☐ Top

The screenshot shows the 'tiger' network configuration window. The 'Config' tab is active. On the left, a tree view shows 'INTERFACE' > 'Serial3/0' selected. The main panel displays configuration for 'Serial3/0'. The 'Port Status' is 'On'. 'Duplex' is set to 'Full Duplex'. 'Clock Rate' is '2000000'. 'IP Configuration' shows 'IP Address' as '172.21.2.3' and 'Subnet Mask' as '255.255.255.0'. 'Tx Ring Limit' is '10'. Below the configuration, a text area shows 'Equivalent IOS Commands' for configuring the serial interface. A 'Top' button is at the bottom left.

Physical **Config** CLI Attributes

GLOBAL

- Settings
- Algorithm Settings

ROUTING

- Static
- RIP

INTERFACE

- FastEthernet0/0
- FastEthernet1/0
- Serial2/0
- Serial3/0**
- FastEthernet4/0
- FastEthernet5/0

Serial3/0

Port Status ☒ On

Duplex ☒ Full Duplex

Clock Rate 2000000

IP Configuration

IP Address 172.21.2.3

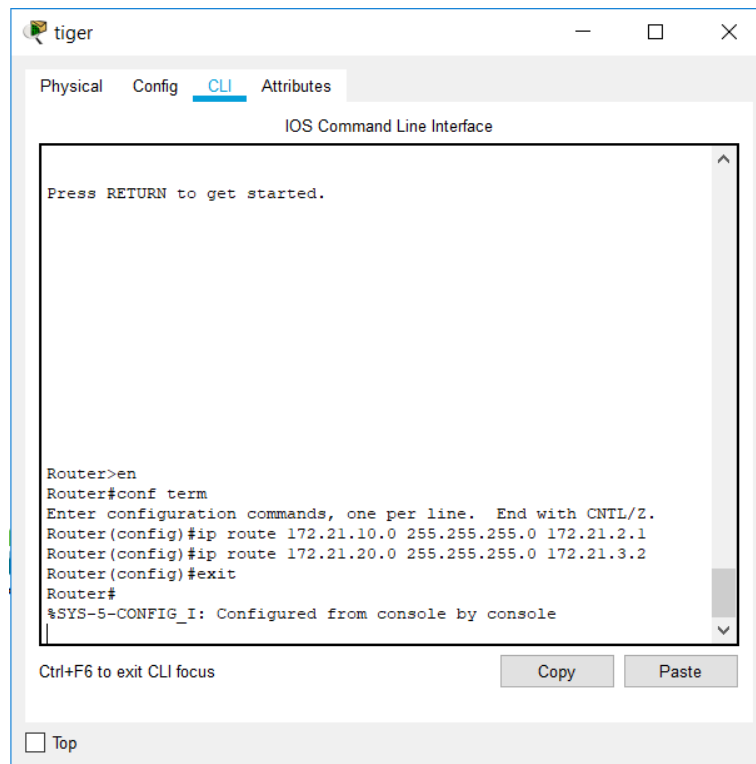
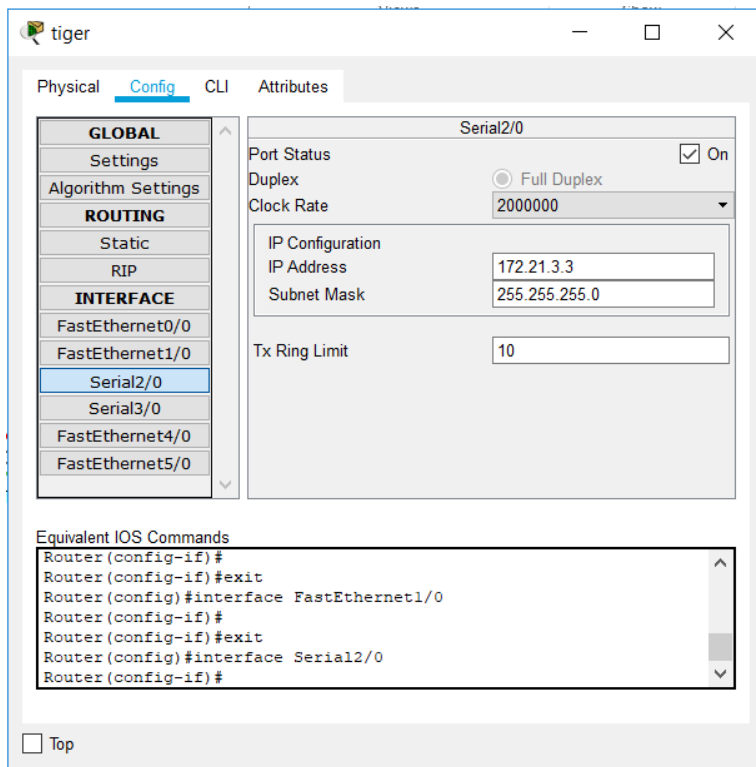
Subnet Mask 255.255.255.0

Tx Ring Limit 10

Equivalent IOS Commands

```
Router(config-if)#
Router(config-if)#exit
Router(config)#interface Serial2/0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface Serial3/0
Router(config-if)#
```

☐ Top



3. Konfigurasi tiap PC dengan nama dan alamat IP :

Physical Config **Desktop** Programming Attributes

IP Configuration X

Interface: FastEthernet0

IP Configuration

☐ DHCP ☒ Static

IP Address: 172.21.10.11

Subnet Mask: 255.255.255.0

Default Gateway: 172.21.10.10

DNS Server: 0.0.0.0

IPv6 Configuration

☐ DHCP ☐ Auto Config ☒ Static

IPv6 Address: /

Link Local Address: FE80::201:C9FF:FE12:9166

IPv6 Gateway:

IPv6 DNS Server:

☐ Top

Physical Config **Desktop** Programming Attributes

IP Configuration X

Interface: FastEthernet0

IP Configuration

☐ DHCP ☒ Static

IP Address: 172.21.20.21

Subnet Mask: 255.255.255.0

Default Gateway: 172.21.20.20

DNS Server: 0.0.0.0

IPv6 Configuration

☐ DHCP ☐ Auto Config ☒ Static

IPv6 Address: /

Link Local Address: FE80::2D0:97FF:FEB5:8AA4

IPv6 Gateway:

IPv6 DNS Server:

☐ Top

Physical Config **Desktop** Programming Attributes

IP Configuration X

Interface: FastEthernet0

IP Configuration

☐ DHCP ☒ Static

IP Address: 172.21.30.31

Subnet Mask: 255.255.255.0

Default Gateway: 172.21.30.30

DNS Server: 0.0.0.0

IPv6 Configuration

☐ DHCP ☐ Auto Config ☒ Static

IPv6 Address: /

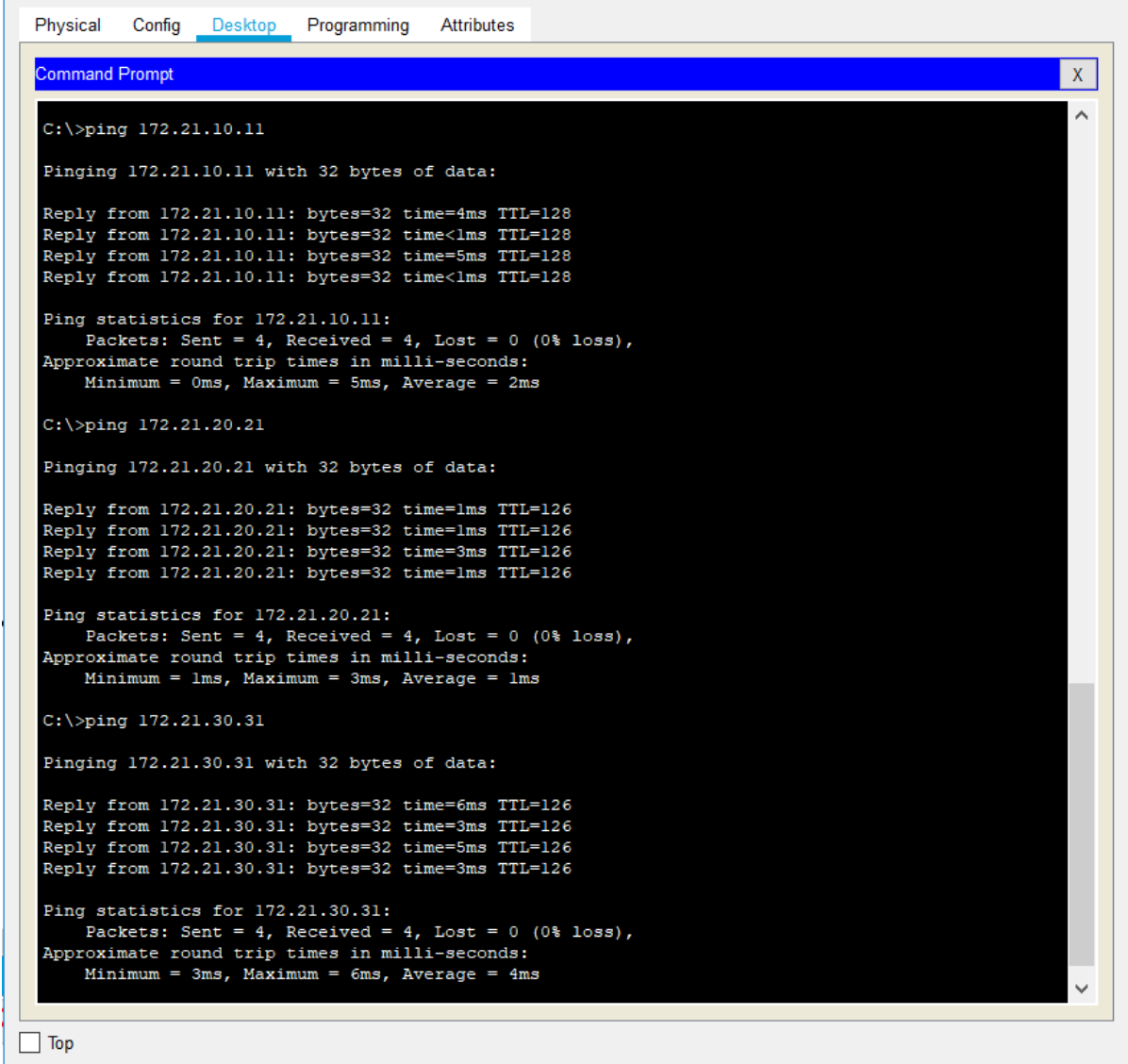
Link Local Address: FE80::20B:BEFF:FE78:1EB4

IPv6 Gateway:

IPv6 DNS Server:

☐ Top

4. Pengujian



```
Physical  Config  Desktop  Programming  Attributes

Command Prompt

C:\>ping 172.21.10.11

Pinging 172.21.10.11 with 32 bytes of data:

Reply from 172.21.10.11: bytes=32 time=4ms TTL=128
Reply from 172.21.10.11: bytes=32 time<1ms TTL=128
Reply from 172.21.10.11: bytes=32 time=5ms TTL=128
Reply from 172.21.10.11: bytes=32 time<1ms TTL=128

Ping statistics for 172.21.10.11:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 5ms, Average = 2ms

C:\>ping 172.21.20.21

Pinging 172.21.20.21 with 32 bytes of data:

Reply from 172.21.20.21: bytes=32 time=1ms TTL=126
Reply from 172.21.20.21: bytes=32 time=1ms TTL=126
Reply from 172.21.20.21: bytes=32 time=3ms TTL=126
Reply from 172.21.20.21: bytes=32 time=1ms TTL=126

Ping statistics for 172.21.20.21:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 1ms, Maximum = 3ms, Average = 1ms

C:\>ping 172.21.30.31

Pinging 172.21.30.31 with 32 bytes of data:

Reply from 172.21.30.31: bytes=32 time=6ms TTL=126
Reply from 172.21.30.31: bytes=32 time=3ms TTL=126
Reply from 172.21.30.31: bytes=32 time=5ms TTL=126
Reply from 172.21.30.31: bytes=32 time=3ms TTL=126

Ping statistics for 172.21.30.31:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 3ms, Maximum = 6ms, Average = 4ms

☐ Top
```