

LAPORAN PRAKTIKUM JARKOM PERTEMUAN KE-9

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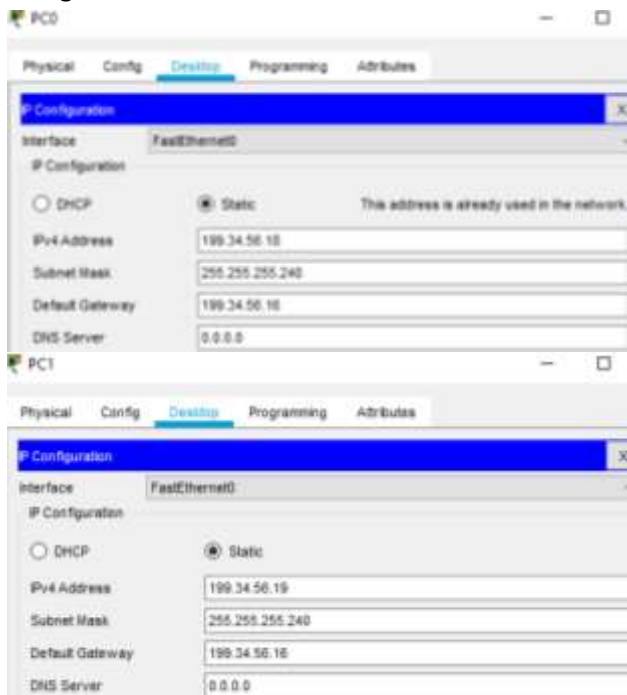
SUBNETTING DAN STATIC ROUTING (1)

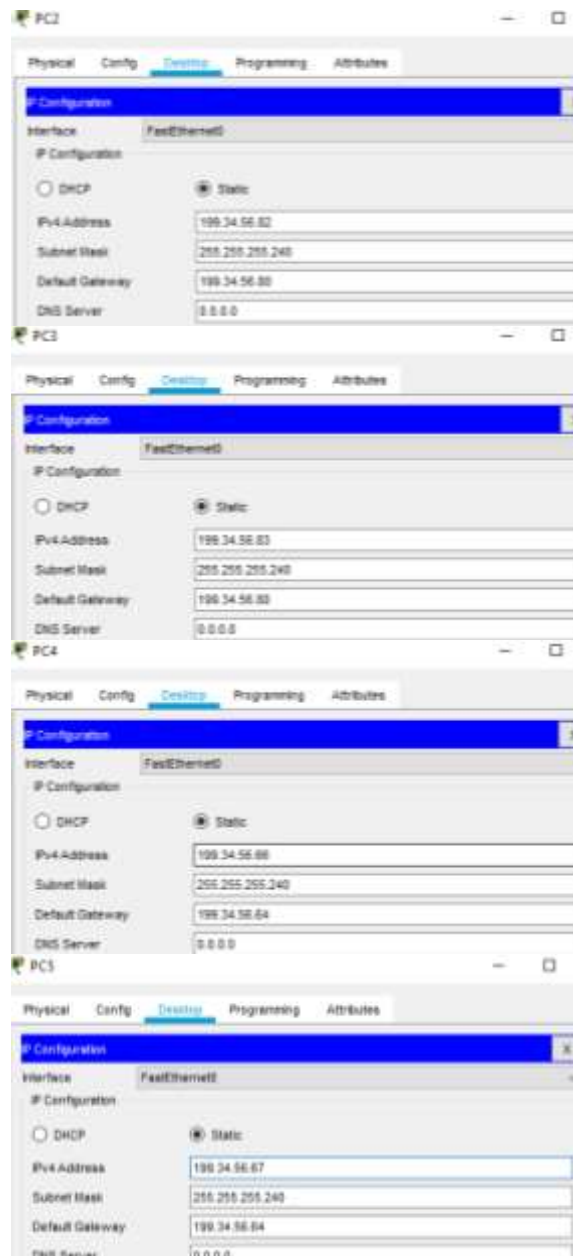
A. Praktik

1. Buatlah topologi seperti berikut ini dan lakukan pengalamatan dan proses routing jaringan sesuai dengan alamat IP yang telah diberikan.
 - a. Konfigurasi Laptop



b. Konfigurasi PC





c. Konfigurasi Router

- Router 1

```
Router(config)#interface fa0/0
Router(config-if)#ip address 199.34.56.1 255.255.255.240
Router(config-if)#no shut

Router(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up

Router(config-if)#interface fa1/0
Router(config-if)#ip address 199.34.56.49 255.255.255.240
Router(config-if)#no shut

Router(config)#interface fa4/0
Router(config-if)#ip address 199.34.56.65 255.255.255.240
Router(config-if)#no shut

Router(config-if)#
%LINK-5-CHANGED: Interface FastEthernet4/0, changed state to up
```

- Router 2

```
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface fa0/0
Router(config-if)#ip address 199.34.56.2 255.255.255.240
Router(config-if)#no shut

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)#interface fa1/0
Router(config-if)#ip address 199.34.56.97 255.255.255.240
Router(config-if)#no shut

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

Router(config-if)#interface fa4/0
Router(config-if)#ip address 199.34.56.113 255.255.255.240
Router(config-if)#no shut

Router(config-if)#
%LINK-5-CHANGED: Interface FastEthernet4/0, changed state to up
```

- Konfigurasi Router 3

```
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface fa0/0
Router(config-if)#ip address 199.34.56.98 255.255.255.240
Router(config-if)#no shut

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)#interface fa1/0
Router(config-if)#ip address 199.34.56.17 255.255.255.240
Router(config-if)#no shut

Router(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
in
^
% Invalid input detected at '^' marker.

Router(config-if)#interface fa4/0
Router(config-if)#ip address 199.34.56.81 255.255.255.240
Router(config-if)#no shut

Router(config-if)#
%LINK-5-CHANGED: Interface FastEthernet4/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet4/0,
changed state to up
```

- Konfigurasi Router 4

```
Router(config-if)#interface fa1/0
Router(config-if)#ip add 199.34.56.33 255.255.255.240
Router(config-if)#no shut
Router(config-if)#interface fa0/0
Router(config-if)#ip add
% Incomplete command.
Router(config-if)#ip add 199.34.56.114 255.255.255.240
Router(config-if)#no shut

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
```

d. Konfigurasi Static Routing

- Router 1

```
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#ip route 199.34.56.32 255.255.255.240 199.34.56.114
Router(config)#ip route 199.34.56.16 255.255.255.240 199.34.56.98
Router(config)#ip route 199.34.56.80 255.255.255.240 199.34.56.98
```

- Router 2

```
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#ip route 199.34.56.48 255.255.255.240 199.34.56.1
Router(config)#ip route 199.34.56.64 255.255.255.240 199.34.56.1
Router(config)#ip route 199.34.56.16 255.255.255.240 199.34.56.98
Router(config)#ip route 199.34.56.80 255.255.255.240 199.34.56.98
Router(config)#ip route 199.34.56.32 255.255.255.240 199.34.56.114
Router(config)#
```

- Router 3

```
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#ip route 199.34.56.48 255.255.255.240 199.34.56.1
Router(config)#ip route 199.34.56.64 255.255.255.240 199.34.56.1
Router(config)#ip route 199.34.56.32 255.255.255.240 199.34.56.114
^
% Invalid input detected at '^' marker.

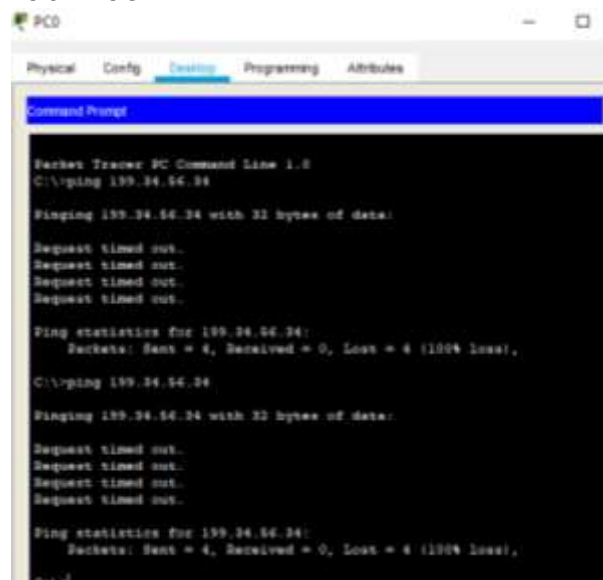
Router(config)#ip route 199.34.56.32 255.255.255.240 199.34.56.114
Router(config)#
```

- Router 4

```
Router(config)#ip route 199.34.56.48 255.255.255.240 199.34.56.113
Router(config)#ip route 199.34.56.64 255.255.255.240 199.34.56.113
Router(config)#ip route 199.34.56.16 255.255.255.240 199.34.56.113
Router(config)#ip route 199.34.56.80 255.255.255.240 199.34.56.113
Router(config)#ip route 199.34.56.0 255.255.255.240 199.34.56.113
```

e. Tes Jaringan

- PC 0 – PC 5



- PC 6 – PC 0

```

PC6
Physical Config Desktop Programming Attributes
Command Prompt
Packet Tracer PC Command Line 1.0
C:\>ping 199.34.56.16

Pinging 199.34.56.16 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 199.34.56.16:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

C:\>ping 199.34.56.17

Pinging 199.34.56.17 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 199.34.56.17:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

C:\>ping 199.34.56.17

```

- f. Table Routing

- Router 1

Routing Table for Router1

Type	Network	Port	Next Hop IP	Metric
C	199.34.56.0/28	FastEthernet0/0	---	0/0
C	199.34.56.48/28	FastEthernet1/0	---	0/0
C	199.34.56.64/28	FastEthernet4/0	---	0/0

- Router 2

Routing Table for Router2

Type	Network	Port	Next Hop IP	Metric
C	199.34.56.0/28	FastEthernet0/0	---	0/0
S	199.34.56.16/28	---	199.34.56.98	1/0
S	199.34.56.32/28	---	199.34.56.114	1/0
S	199.34.56.48/28	---	199.34.56.1	1/0
S	199.34.56.64/28	---	199.34.56.1	1/0
S	199.34.56.80/28	---	199.34.56.98	1/0

- Router 3

Routing Table for Router3

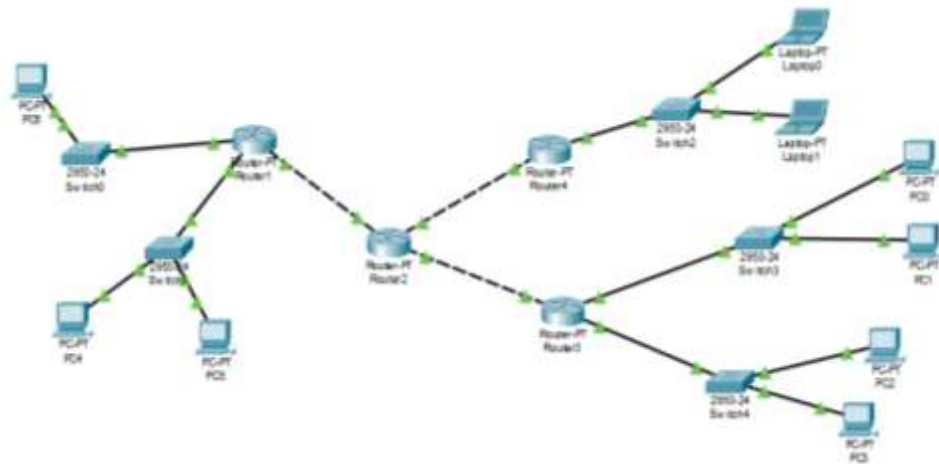
Type	Network	Port	Next Hop IP	Metric
C	199.34.56.16/28	FastEthernet1/0	---	0/0
C	199.34.56.80/28	FastEthernet4/0	---	0/0
C	199.34.56.96/28	FastEthernet0/0	---	0/0

- Router 4

Routing Table for Router4

Type	Network	Port	Next Hop IP	Metric
S	199.34.56.0/28	---	199.34.56.113	1/0
S	199.34.56.16/28	---	199.34.56.113	1/0
C	199.34.56.32/28	FastEthernet1/0	---	0/0
S	199.34.56.48/28	---	199.34.56.113	1/0
S	199.34.56.48/28	---	199.34.56.1	1/0
S	199.34.56.64/28	---	199.34.56.113	1/0
S	199.34.56.64/28	---	199.34.56.1	1/0
S	199.34.56.80/28	---	199.34.56.113	1/0
C	199.34.56.112/28	FastEthernet0/0	---	0/0

g. Topologi



B. Tugas

1. Diketahui terdapat sebuah topologi jaringan yang akan dibagi menjadi 8 bagian yang sama besar seperti yang tampak pada gambar berikut.
 “Bagian tugas untuk saat ini ditangguhkan sampai saya menjelaskan proses subnetting pada pertemuan tatap muka di kelas teori. Jadi laporan hanya berisi bagian praktik”