

KONSEP JARINGAN
LAPORAN TUGAS
SOAL PRE UAS



NAMA DOSEN PENGAMPU DAN GELAR

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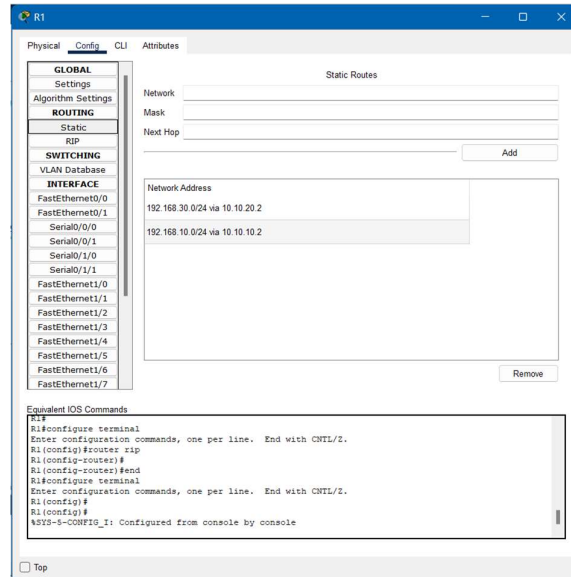
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A. Konfigurasi

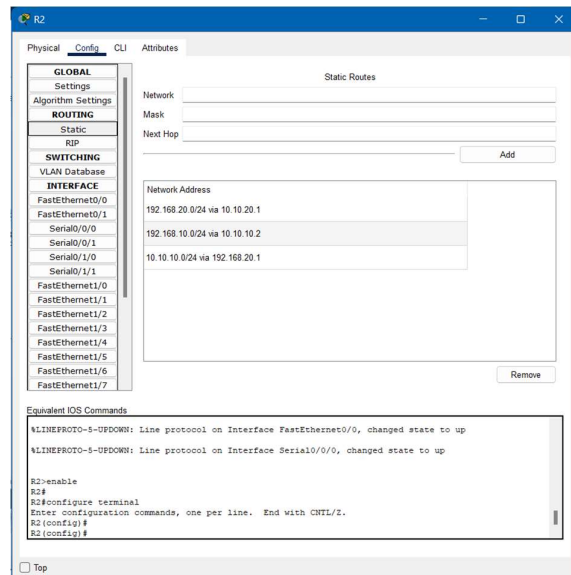
1. Soal 1

Konfigurasi menggunakan static supaya seluruh PC dapat terhubung dengan baik. Caranya ialah menambahkan address yang akan dilalui tiap PC ketika mengirim data

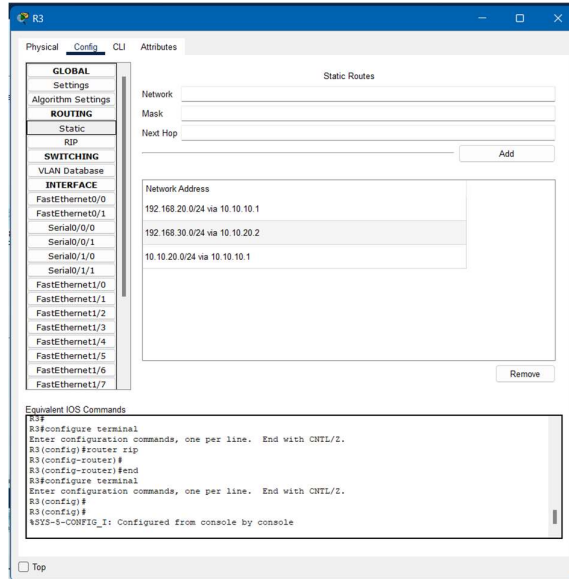
- R1



- R2



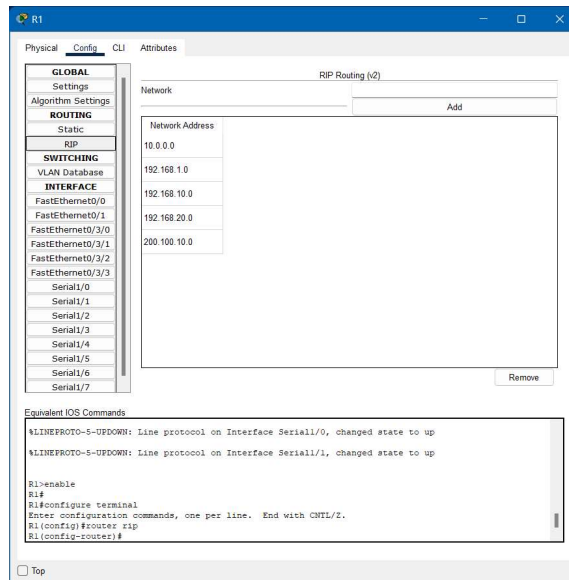
- R3



2. Soal 2

Konfigurasi supaya seluruh PC dapat terhubung ke ISP dengan baik. Caranya ialah menambahkan IP gateway menggunakan RIP di setiap router

- R1



- R2

Physical Config CLI Attributes

GLOBAL
Settings
Algorithm Settings
ROUTING
Static
RIP
SWITCHING
VLAN Database
INTERFACE
FastEthernet0/0
FastEthernet0/1
FastEthernet0/3/0
FastEthernet0/3/1
FastEthernet0/3/2
FastEthernet0/3/3
Serial1/0
Serial1/1
Serial1/2
Serial1/3
Serial1/4
Serial1/5
Serial1/6
Serial1/7

RIP Routing (v2)

Network

Add

Network Address

10.0.0.0
192.168.1.0
192.168.10.0
192.168.20.0
200.100.10.0

Remove

Equivalent IOS Commands

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

```
R2(config)#router rip
R2(config-router)#
R2(config-router)#end
R2#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
R2(config)#
R2(config)#
%SYS-5-CONFIG_I: Configured from console by console
R2(config)#router rip
R2(config-router)#
```

☐ Top

- R3 (ISP)

Physical Config CLI Attributes

GLOBAL
Settings
Algorithm Settings
ROUTING
Static
RIP
SWITCHING
VLAN Database
INTERFACE
FastEthernet0/0
FastEthernet0/1
FastEthernet0/3/0
FastEthernet0/3/1
FastEthernet0/3/2
FastEthernet0/3/3
Serial1/0
Serial1/1
Serial1/2
Serial1/3
Serial1/4
Serial1/5
Serial1/6
Serial1/7

RIP Routing (v2)

Network

Add

Network Address

10.0.0.0
192.168.1.0
192.168.10.0
192.168.20.0
200.100.10.0

Remove

Equivalent IOS Commands

%LINK-5-CHANGED: Interface Serial1/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial1/0, changed state to up

```
ISP#enable
ISP#
ISP#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
ISP(config)#router rip
ISP(config-router)#
```

☐ Top

3. Soal 3

Supaya bisa PC0 bisa ping ke PC1 dan sebaliknya, anda perlu menambahkan Static route yang akan dilalui oleh data dari PC0 dan PC1

The screenshot shows the configuration interface for router R2. The left sidebar contains a tree view with the following categories: GLOBAL (Settings, Algorithm Settings), ROUTING (Static, RIP), SWITCHING (VLAN Database), and INTERFACE (FastEthernet0/0, FastEthernet0/1). The main panel is titled 'Static Routes' and contains the following fields: Network, Mask, and Next Hop. Below these fields is an 'Add' button. A table below the 'Add' button shows the configured static routes:

Network Address
192.168.1.0/24 via 172.16.0.2
192.168.0.0/24 via 10.0.0.1

Below the table is a 'Remove' button. At the bottom of the interface, there is a section for 'Equivalent IOS Commands' containing the following text:

```
ip route 192.168.1.0 255.255.255.0 172.16.0.2
R2(config)#ip route 192.168.0.0 255.255.255.0 10.0.0.1
R2(config)#
R2(config)#router rip
R2(config-router)#
R2(config-router)#end
R2#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
R2(config)#
R2(config)#
NDVS-S-CONFIG_I: Configured from console by console
```

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

B. Perobaan Ping

1. Soal 1

- Dari PC0 ke PC3

```
C:\>ping 192.168.10.2

Pinging 192.168.10.2 with 32 bytes of data:

Request timed out.
Reply from 192.168.10.2: bytes=32 time=23ms TTL=125
Reply from 192.168.10.2: bytes=32 time=2ms TTL=125
Reply from 192.168.10.2: bytes=32 time=2ms TTL=125

Ping statistics for 192.168.10.2:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 2ms, Maximum = 23ms, Average = 9ms
```

- Dari PC2 ke PC1

```
C:\>ping 192.168.30.2

Pinging 192.168.30.2 with 32 bytes of data:

Reply from 192.168.30.2: bytes=32 time=42ms TTL=125
Reply from 192.168.30.2: bytes=32 time=23ms TTL=125
Reply from 192.168.30.2: bytes=32 time=40ms TTL=125
Reply from 192.168.30.2: bytes=32 time=20ms TTL=125

Ping statistics for 192.168.30.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 20ms, Maximum = 42ms, Average = 31ms
```

- Dari PC0 ke PC5

```
C:\>ping 192.168.20.2

Pinging 192.168.20.2 with 32 bytes of data:

Request timed out.
Reply from 192.168.20.2: bytes=32 time=3ms TTL=126
Reply from 192.168.20.2: bytes=32 time=1ms TTL=126
Reply from 192.168.20.2: bytes=32 time=12ms TTL=126

Ping statistics for 192.168.20.2:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 1ms, Maximum = 12ms, Average = 5ms
```

- Dari PC 4 ke PC1

```
C:\>ping 192.168.30.3

Pinging 192.168.30.3 with 32 bytes of data:

Reply from 192.168.30.3: bytes=32 time=1ms TTL=126
Reply from 192.168.30.3: bytes=32 time=13ms TTL=126
Reply from 192.168.30.3: bytes=32 time=1ms TTL=126
Reply from 192.168.30.3: bytes=32 time=23ms TTL=126

Ping statistics for 192.168.30.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 1ms, Maximum = 23ms, Average = 9ms
```

- Dari PC 4 ke PC2

```
C:\>ping 192.168.10.2

Pinging 192.168.10.2 with 32 bytes of data:

Reply from 192.168.10.2: bytes=32 time=37ms TTL=126
Reply from 192.168.10.2: bytes=32 time=1ms TTL=126
Reply from 192.168.10.2: bytes=32 time=18ms TTL=126
Reply from 192.168.10.2: bytes=32 time=3ms TTL=126

Ping statistics for 192.168.10.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 1ms, Maximum = 37ms, Average = 14ms
```

- Dari PC3 ke PC5

```
C:\>ping 192.168.20.2

Pinging 192.168.20.2 with 32 bytes of data:

Reply from 192.168.20.2: bytes=32 time=1ms TTL=126
Reply from 192.168.20.2: bytes=32 time=17ms TTL=126
Reply from 192.168.20.2: bytes=32 time=1ms TTL=126
Reply from 192.168.20.2: bytes=32 time=1ms TTL=126

Ping statistics for 192.168.20.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 1ms, Maximum = 17ms, Average = 5ms
```

2. Soal 2

- Dari PC0 ke PC5

```
C:\>ping 192.168.1.2

Pinging 192.168.1.2 with 32 bytes of data:

Request timed out.
Reply from 192.168.1.2: bytes=32 time<1ms TTL=127
Reply from 192.168.1.2: bytes=32 time<1ms TTL=127
Reply from 192.168.1.2: bytes=32 time<1ms TTL=127

Ping statistics for 192.168.1.2:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms
```

- Dari PC4 ke PC1

```
C:\>ping 192.168.10.2

Pinging 192.168.10.2 with 32 bytes of data:

Request timed out.
Reply from 192.168.10.2: bytes=32 time<1ms TTL=127
Reply from 192.168.10.2: bytes=32 time<1ms TTL=127
Reply from 192.168.10.2: bytes=32 time=1ms TTL=127

Ping statistics for 192.168.10.2:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms
```

- Dari PC2 ke PC7

```
Pinging 192.168.20.4 with 32 bytes of data:

Request timed out.
Reply from 192.168.20.4: bytes=32 time=1ms TTL=126
Reply from 192.168.20.4: bytes=32 time=53ms TTL=126
Reply from 192.168.20.4: bytes=32 time=36ms TTL=126

Ping statistics for 192.168.20.4:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
Approximate round trip times in milli-seconds:
    Minimum = 1ms, Maximum = 53ms, Average = 30ms
```

- Dari PC6 ke PC2

```
C:\>ping 192.168.10.2

Pinging 192.168.10.2 with 32 bytes of data:

Reply from 192.168.10.2: bytes=32 time=1ms TTL=126
Reply from 192.168.10.2: bytes=32 time=1ms TTL=126
Reply from 192.168.10.2: bytes=32 time=13ms TTL=126
Reply from 192.168.10.2: bytes=32 time=51ms TTL=126

Ping statistics for 192.168.10.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 1ms, Maximum = 51ms, Average = 16ms
```

- Dari PC6 ke PC3

```
C:\>ping 192.168.1.4

Pinging 192.168.1.4 with 32 bytes of data:

Request timed out.
Reply from 192.168.1.4: bytes=32 time=19ms TTL=126
Reply from 192.168.1.4: bytes=32 time=2ms TTL=126
Reply from 192.168.1.4: bytes=32 time=19ms TTL=126

Ping statistics for 192.168.1.4:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
Approximate round trip times in milli-seconds:
    Minimum = 2ms, Maximum = 19ms, Average = 13ms
```

- Dari PC2 ke Web Server

```
C:\>ping 192.168.20.11

Pinging 192.168.20.11 with 32 bytes of data:

Request timed out.
Reply from 192.168.20.11: bytes=32 time=18ms TTL=126
Reply from 192.168.20.11: bytes=32 time=2ms TTL=126
Reply from 192.168.20.11: bytes=32 time=4ms TTL=126

Ping statistics for 192.168.20.11:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
Approximate round trip times in milli-seconds:
    Minimum = 2ms, Maximum = 18ms, Average = 8ms
```


- Dari PC2 ke File Server

```
C:\>ping 192.168.20.10

Pinging 192.168.20.10 with 32 bytes of data:

Request timed out.
Reply from 192.168.20.10: bytes=32 time=14ms TTL=126
Reply from 192.168.20.10: bytes=32 time=12ms TTL=126
Reply from 192.168.20.10: bytes=32 time=10ms TTL=126

Ping statistics for 192.168.20.10:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 10ms, Maximum = 14ms, Average = 12ms
```

- Dari PC4 ke Web Server

```
C:\>ping 192.168.20.11

Pinging 192.168.20.11 with 32 bytes of data:

Reply from 192.168.20.11: bytes=32 time=11ms TTL=126
Reply from 192.168.20.11: bytes=32 time=38ms TTL=126
Reply from 192.168.20.11: bytes=32 time=1ms TTL=126
Reply from 192.168.20.11: bytes=32 time=32ms TTL=126

Ping statistics for 192.168.20.11:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 1ms, Maximum = 38ms, Average = 20ms
```

- Dari PC4 ke File Server

```
C:\>ping 192.168.20.10

Pinging 192.168.20.10 with 32 bytes of data:

Reply from 192.168.20.10: bytes=32 time=21ms TTL=126
Reply from 192.168.20.10: bytes=32 time=13ms TTL=126
Reply from 192.168.20.10: bytes=32 time=22ms TTL=126
Reply from 192.168.20.10: bytes=32 time=3ms TTL=126

Ping statistics for 192.168.20.10:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 3ms, Maximum = 22ms, Average = 14ms
```

- Dari PC7 ke Web Server

```
C:\>ping 192.168.20.11

Pinging 192.168.20.11 with 32 bytes of data:

Reply from 192.168.20.11: bytes=32 time<1ms TTL=128
Reply from 192.168.20.11: bytes=32 time<1ms TTL=128
Reply from 192.168.20.11: bytes=32 time<1ms TTL=128
Reply from 192.168.20.11: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.20.11:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms
```

- Dari PC7 ke File Server

```
C:\>ping 192.168.20.10

Pinging 192.168.20.10 with 32 bytes of data:

Reply from 192.168.20.10: bytes=32 time=1ms TTL=128
Reply from 192.168.20.10: bytes=32 time<1ms TTL=128
Reply from 192.168.20.10: bytes=32 time<1ms TTL=128
Reply from 192.168.20.10: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.20.10:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms
```

3. Soal 3

- Dari PC0 ke PC1

```
C:\>ping 192.168.1.2

Pinging 192.168.1.2 with 32 bytes of data:

Request timed out.
Request timed out.
Reply from 192.168.1.2: bytes=32 time=24ms TTL=125
Reply from 192.168.1.2: bytes=32 time<1ms TTL=125

Ping statistics for 192.168.1.2:
    Packets: Sent = 4, Received = 2, Lost = 2 (50% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 24ms, Average = 12ms
```

- Dari PC1 ke PC0

```
C:\>ping 192.168.0.6

Pinging 192.168.0.6 with 32 bytes of data:

Reply from 192.168.0.6: bytes=32 time<1ms TTL=125
Reply from 192.168.0.6: bytes=32 time=1ms TTL=125
Reply from 192.168.0.6: bytes=32 time<1ms TTL=125
Reply from 192.168.0.6: bytes=32 time<1ms TTL=125

Ping statistics for 192.168.0.6:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms
```