

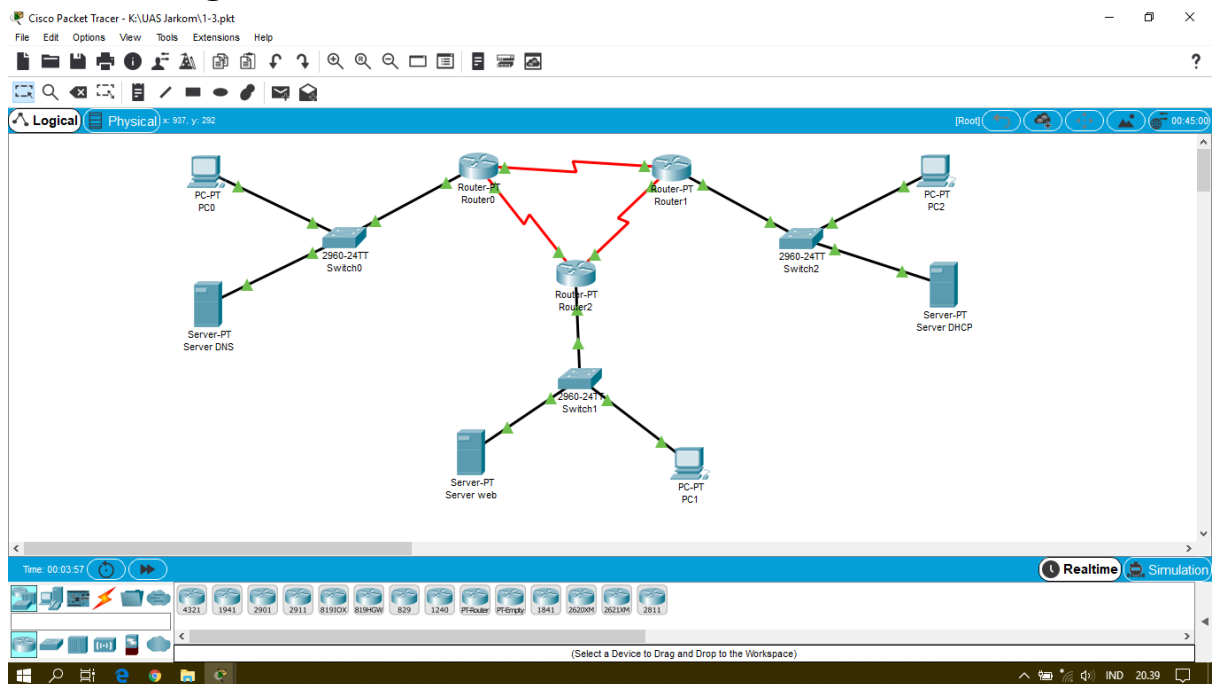
Nama : Oki Kus Mahesa

Nim : L200170064

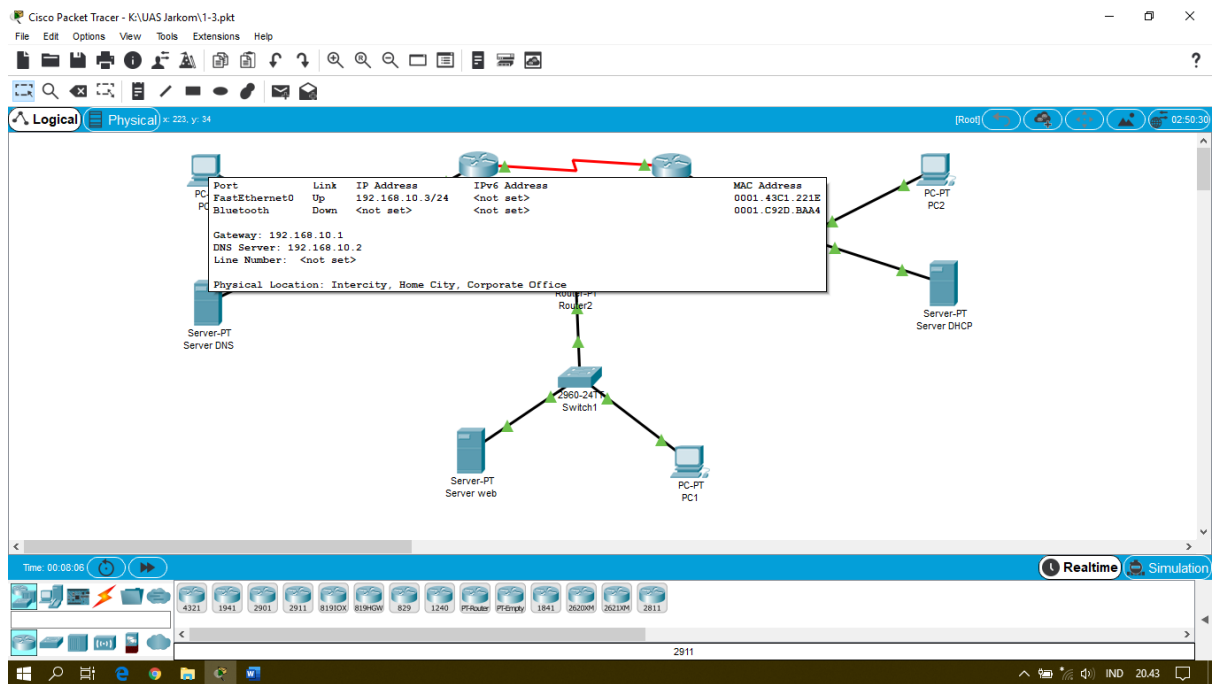
Kelas : B

Penambahan Nilai UAS Jarkom

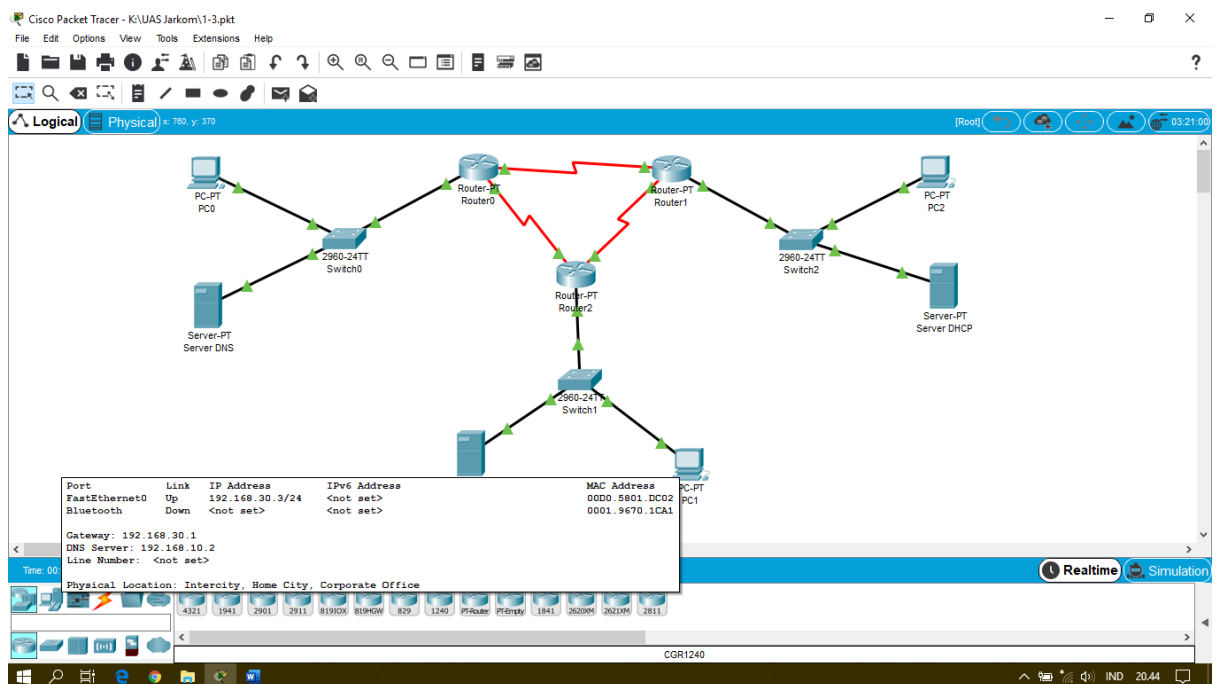
1. Buatlah Topologi jaringan seperti Gambar 1, menggunakan router seri generic



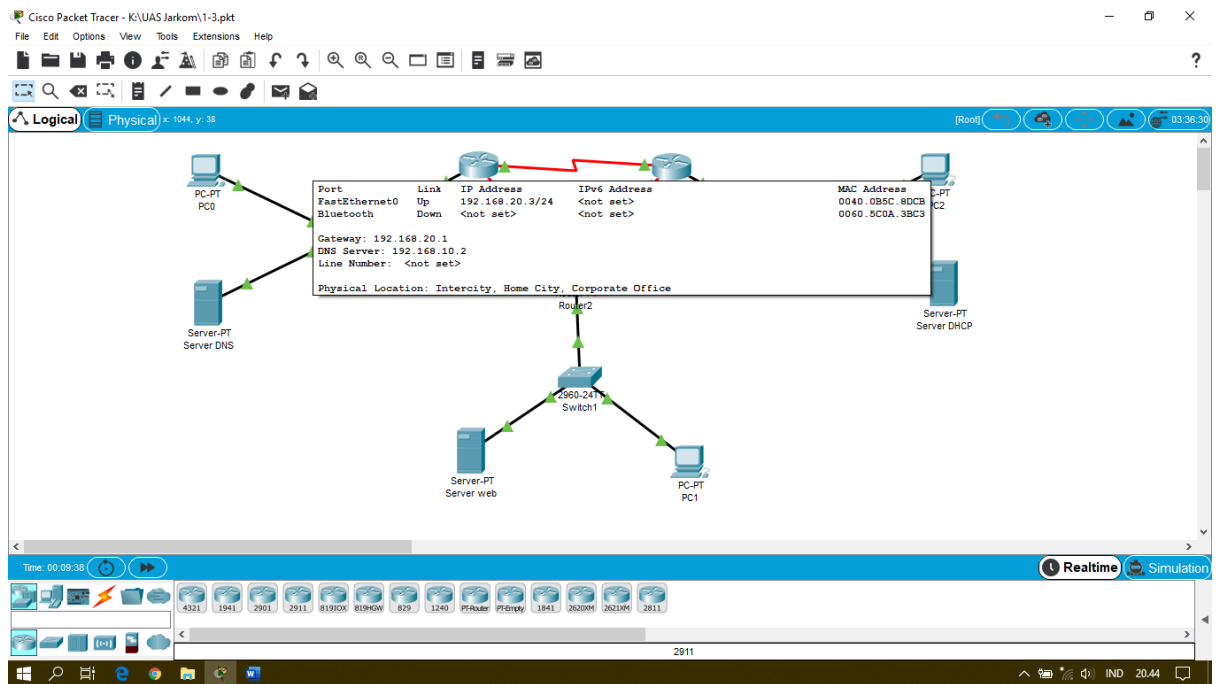
2. Lakukan konfigurasi pengalamatan IP terhadap Router 1,2,3,
Pc 1,2,3 !
Pc0



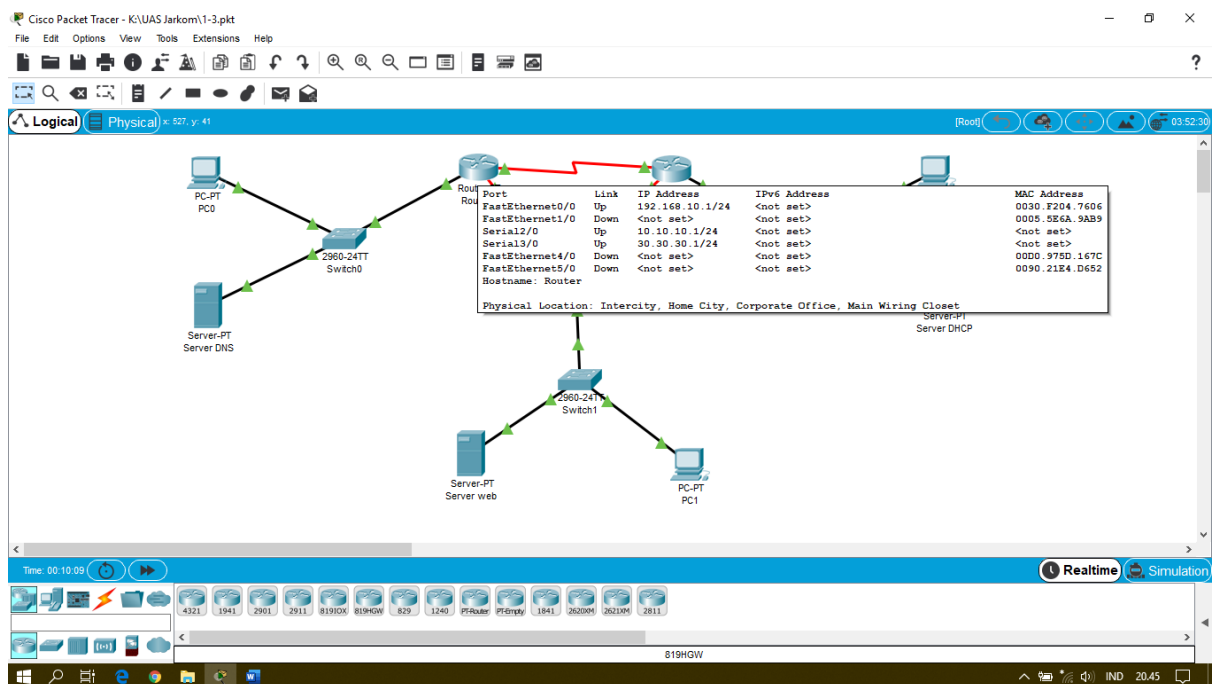
Pc1



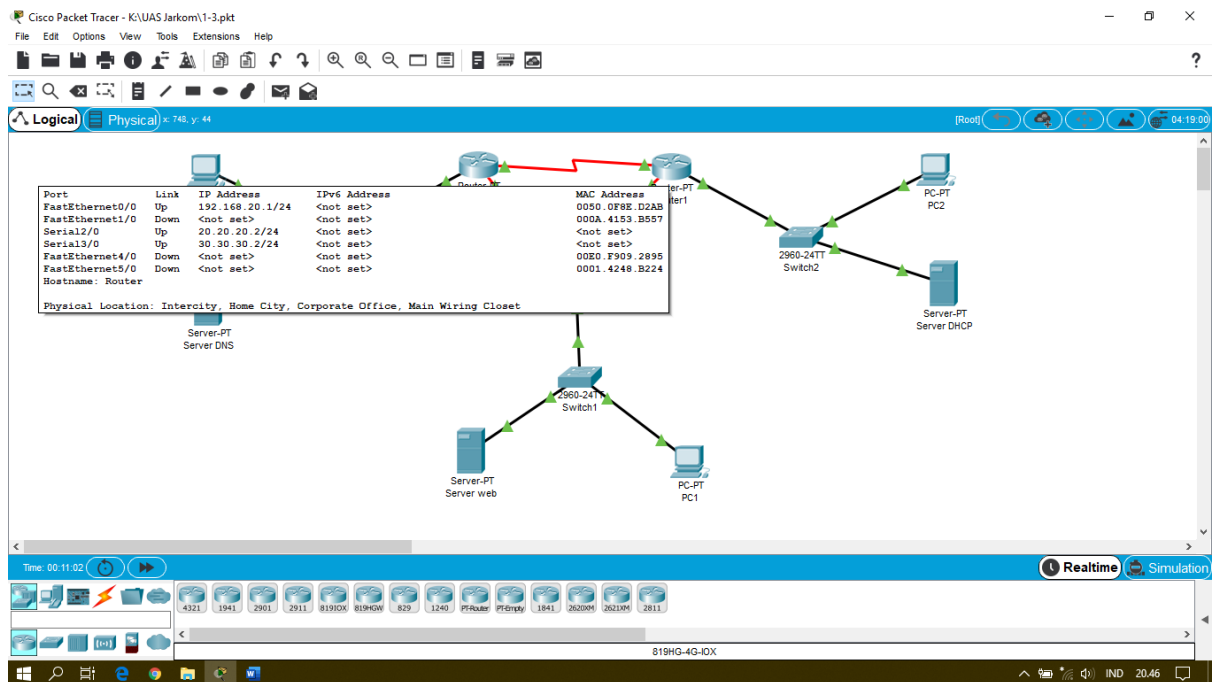
Pc2



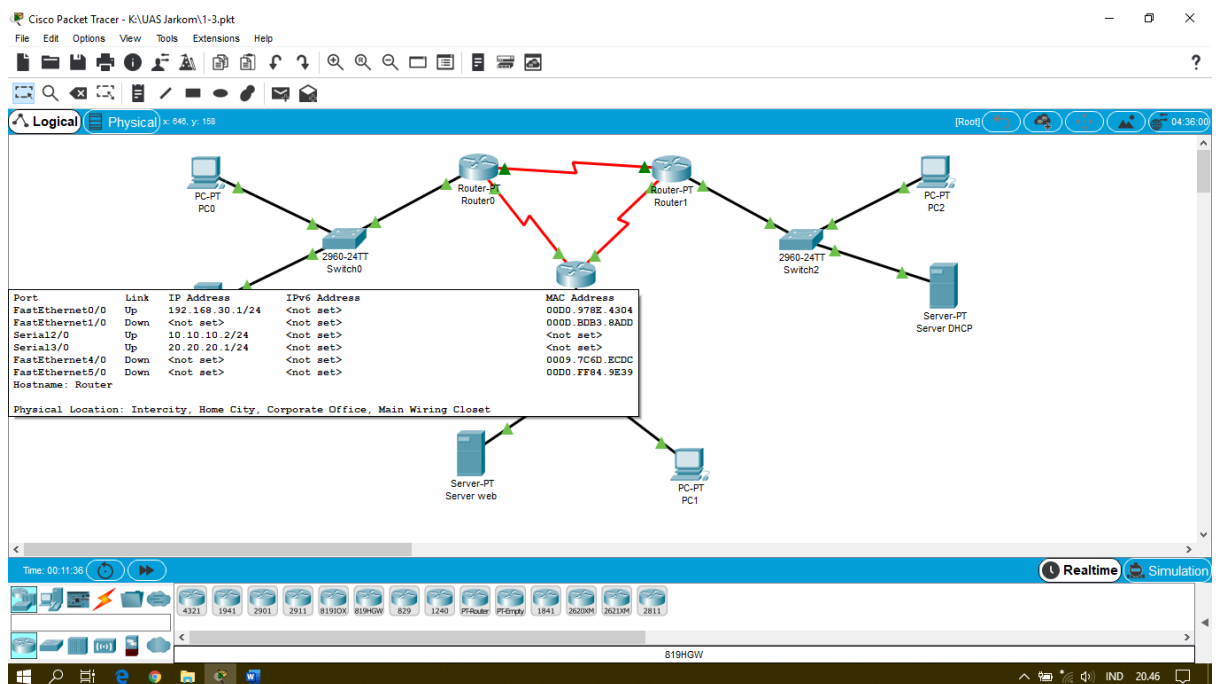
Router0



Router1



Router2



3. Lakukan konfigurasi routing dinamis menggunakan protocol routing RIP pada 3 router tersebut

RIP Router0

The screenshot shows the configuration window for Router0. The left sidebar has a tree view with categories: GLOBAL (Settings, Algorithm Settings), ROUTING (Static, RIP), and INTERFACE (FastEthernet0/0, FastEthernet1/0, Serial2/0, Serial3/0, FastEthernet4/0, FastEthernet5/0). The 'RIP' option under ROUTING is selected. The main area is titled 'RIP Routing' and contains a table for 'Network Address' with the following entries: 10.0.0.0, 20.0.0.0, 30.0.0.0, and 192.168.10.0. An 'Add' button is at the top right of the table, and a 'Remove' button is at the bottom right. Below the table is a text area for 'Equivalent IOS Commands' containing the following commands: Router>enable, Router#, Router#configure terminal, Enter configuration commands, one per line. End with CNTL/Z., Router(config)#router rip, Router(config-router)#, and Router(config-router)#end. A 'Top' button is at the bottom left.

Network Address
10.0.0.0
20.0.0.0
30.0.0.0
192.168.10.0

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

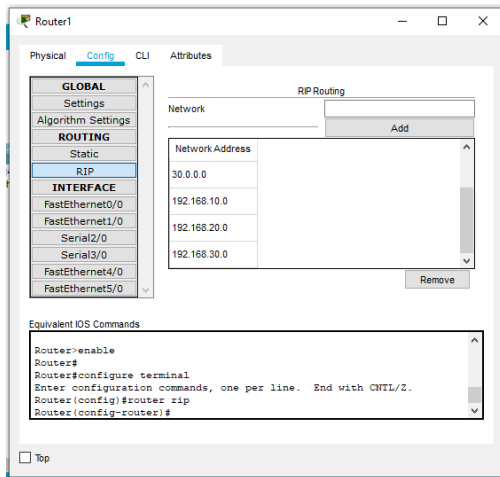
This screenshot is identical to the one above, showing the configuration window for Router0 with the same RIP settings and equivalent IOS commands.

RIP Router1

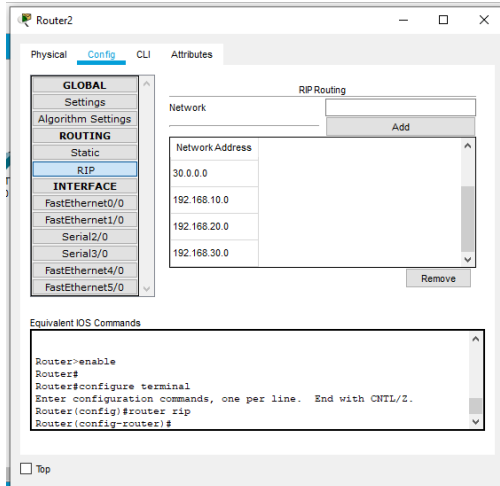
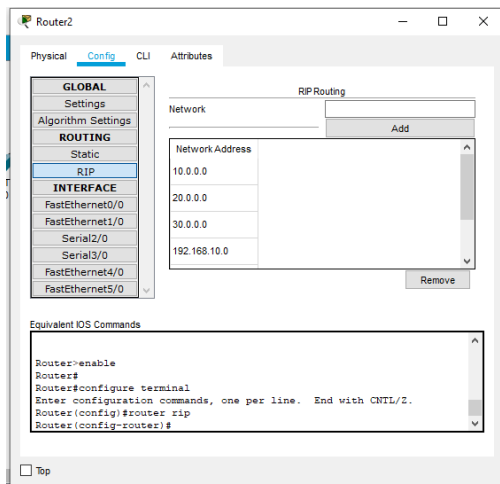
The screenshot shows the configuration window for Router1. The left sidebar is identical to the Router0 window, with 'RIP' selected under ROUTING. The main area is titled 'RIP Routing' and contains a table for 'Network Address' with the following entries: 10.0.0.0, 20.0.0.0, 30.0.0.0, and 192.168.10.0. An 'Add' button is at the top right of the table, and a 'Remove' button is at the bottom right. Below the table is a text area for 'Equivalent IOS Commands' containing the following commands: Router>enable, Router#, Router#configure terminal, Enter configuration commands, one per line. End with CNTL/Z., Router(config)#router rip, Router(config-router)#, and Router(config-router)#. A 'Top' button is at the bottom left.

Network Address
10.0.0.0
20.0.0.0
30.0.0.0
192.168.10.0

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



RIP Router2



4. Lakukan Uji koneksi untuk melihat konektivitas antar PC dan Lakukan konfigurasi routing statis pada 3 router tersebut

Konfigurasi Routing Statis Router0

The screenshot shows the configuration window for Router0. The left sidebar has a tree view with categories: GLOBAL, ROUTING, and INTERFACE. Under ROUTING, 'Static' is selected. The main area is titled 'Static Routes' and contains input fields for 'Network', 'Mask', and 'Next Hop'. Below these is an 'Add' button. A list of configured static routes is shown below the 'Add' button, with two entries: '20.20.20.0/24 via 20.20.20.2' and '30.30.30.0/24 via 30.30.30.2'. A 'Remove' button is at the bottom right of the list. At the bottom, there is a section for 'Equivalent IOS Commands' with a text area containing the following commands:

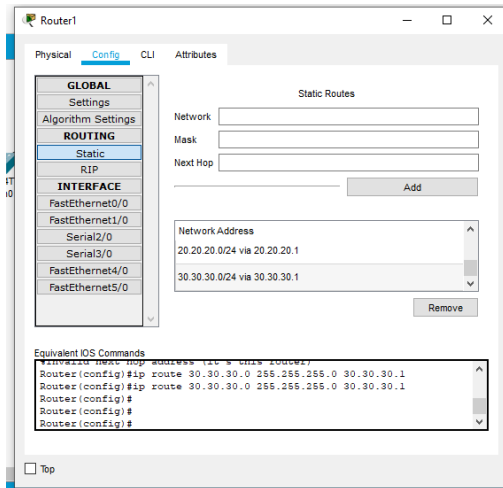
```
Router>enable
Router#
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#
Router(config)#
```

This screenshot is identical to the one above, showing the configuration window for Router0 with the same static routes and equivalent IOS commands.

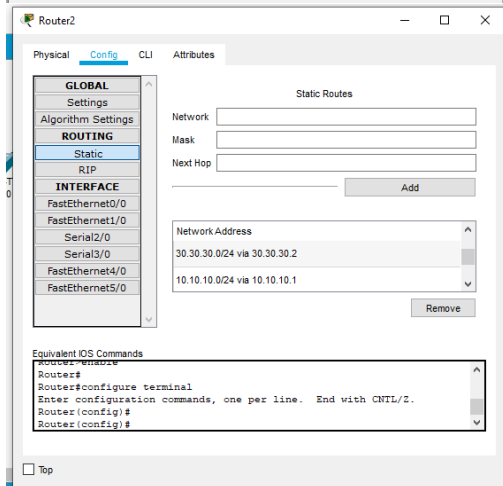
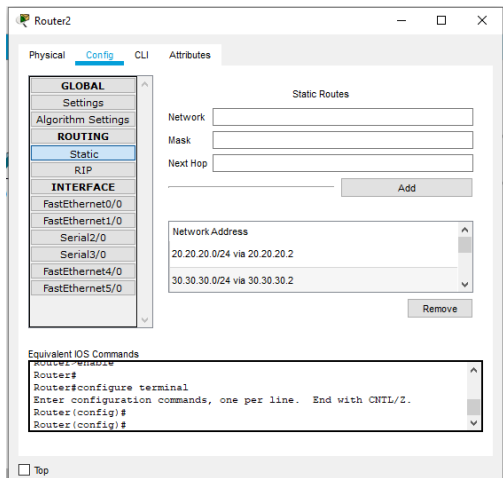
Konfigurasi Routing Statis Router1

The screenshot shows the configuration window for Router1. The left sidebar is the same as Router0, with 'Static' selected under ROUTING. The 'Static Routes' section has the same input fields and 'Add' button. The list of static routes contains two entries: '10.10.10.0/24 via 10.10.10.1' and '10.10.10.0/24 via 10.10.10.2'. The 'Equivalent IOS Commands' section contains the following commands:

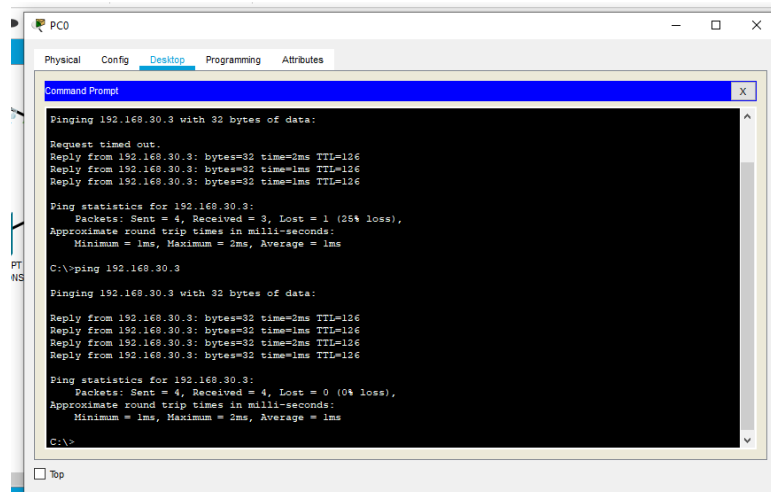
```
Router1>enable
Router1#
Router1#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router1(config)#ip route 30.30.30.0 255.255.255.0 30.30.30.1
Router1(config)#ip route 30.30.30.0 255.255.255.0 30.30.30.1
Router1(config)#
Router1(config)#
```



Konfigurasi Routing Statis Router2



Ping dari Pc0=IP-192.168.10.3 Ke Pc1=IP-192.168.30.3



The screenshot shows a Windows Command Prompt window titled 'PC0'. The user has entered the command 'ping 192.168.30.3'. The output shows four successful replies from 192.168.30.3 with a time of 2ms and TTL=126. The statistics show 4 packets sent, 4 received, and 0% loss.

```
Command Prompt

Pinging 192.168.30.3 with 32 bytes of data:

Request timed out.
Reply from 192.168.30.3: bytes=32 time=2ms TTL=126
Reply from 192.168.30.3: bytes=32 time=1ms TTL=126
Reply from 192.168.30.3: bytes=32 time=1ms TTL=126

Ping statistics for 192.168.30.3:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 1ms, Maximum = 2ms, Average = 1ms

C:\>ping 192.168.30.3

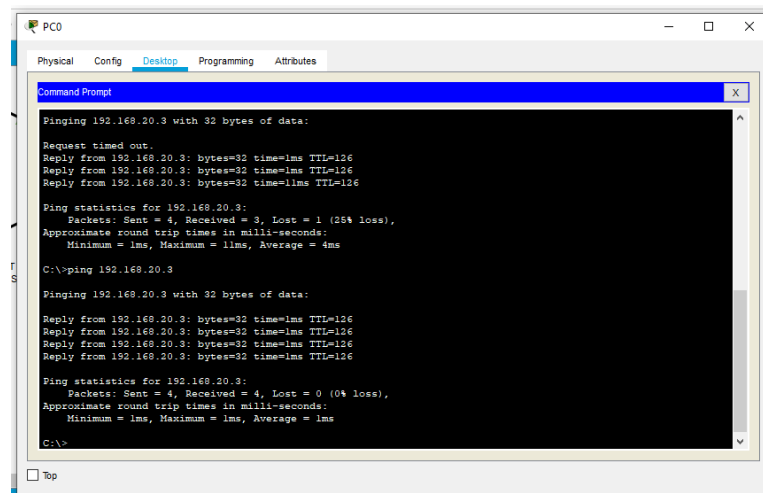
Pinging 192.168.30.3 with 32 bytes of data:

Reply from 192.168.30.3: bytes=32 time=2ms TTL=126
Reply from 192.168.30.3: bytes=32 time=1ms TTL=126
Reply from 192.168.30.3: bytes=32 time=2ms TTL=126
Reply from 192.168.30.3: bytes=32 time=1ms 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 = 2ms, Average = 1ms

C:\>
```

Ping dari Pc0=IP-192.168.10.3 Ke Pc2=IP-192.168.20.3



The screenshot shows a Windows Command Prompt window titled 'PC0'. The user has entered the command 'ping 192.168.20.3'. The output shows four successful replies from 192.168.20.3 with a time of 1ms and TTL=126. The statistics show 4 packets sent, 4 received, and 0% loss.

```
Command Prompt

Pinging 192.168.20.3 with 32 bytes of data:

Request timed out.
Reply from 192.168.20.3: bytes=32 time=1ms TTL=126
Reply from 192.168.20.3: bytes=32 time=1ms TTL=126
Reply from 192.168.20.3: bytes=32 time=1ms TTL=126

Ping statistics for 192.168.20.3:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 1ms, Maximum = 1ms, Average = 1ms

C:\>ping 192.168.20.3

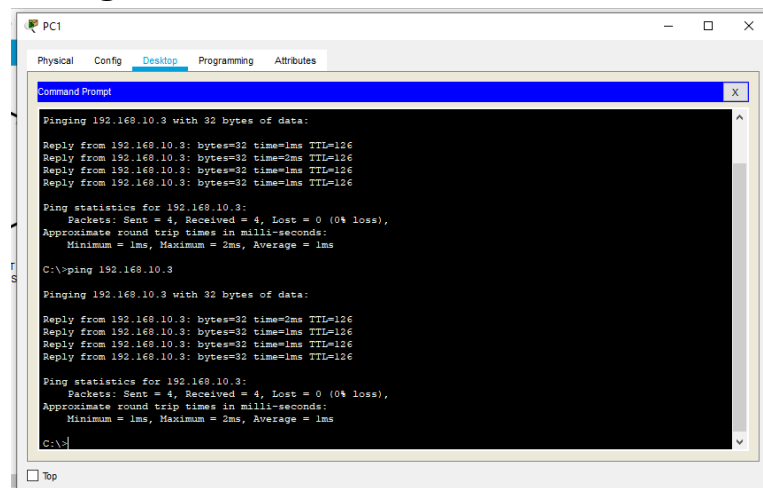
Pinging 192.168.20.3 with 32 bytes of data:

Reply from 192.168.20.3: bytes=32 time=1ms TTL=126
Reply from 192.168.20.3: bytes=32 time=1ms TTL=126
Reply from 192.168.20.3: bytes=32 time=1ms TTL=126
Reply from 192.168.20.3: bytes=32 time=1ms TTL=126

Ping statistics for 192.168.20.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 1ms, Maximum = 1ms, Average = 1ms

C:\>
```

Ping dari Pc1=IP-192.168.30.3 Ke Pc0=IP-192.168.10.3



The screenshot shows a Windows Command Prompt window titled 'PC1'. The user has entered the command 'ping 192.168.10.3'. The output shows four successful replies from 192.168.10.3 with a time of 2ms and TTL=126. The statistics show 4 packets sent, 4 received, and 0% loss.

```
Command Prompt

Pinging 192.168.10.3 with 32 bytes of data:

Reply from 192.168.10.3: bytes=32 time=1ms TTL=126
Reply from 192.168.10.3: bytes=32 time=2ms TTL=126
Reply from 192.168.10.3: bytes=32 time=1ms TTL=126
Reply from 192.168.10.3: bytes=32 time=1ms TTL=126

Ping statistics for 192.168.10.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 1ms, Maximum = 2ms, Average = 1ms

C:\>ping 192.168.10.3

Pinging 192.168.10.3 with 32 bytes of data:

Reply from 192.168.10.3: bytes=32 time=2ms TTL=126
Reply from 192.168.10.3: bytes=32 time=1ms TTL=126
Reply from 192.168.10.3: bytes=32 time=1ms TTL=126
Reply from 192.168.10.3: bytes=32 time=1ms TTL=126

Ping statistics for 192.168.10.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 1ms, Maximum = 2ms, Average = 1ms

C:\>
```

Ping dari Pc1=IP-192.168.30.3 Ke Pc2=IP-192.168.20.3

PC1

Physical Config Desktop Programming Attributes

Command Prompt

```
Pinging 192.168.20.3 with 32 bytes of data:
Reply from 192.168.20.3: bytes=32 time=2ms TTL=126
Reply from 192.168.20.3: bytes=32 time=2ms TTL=126
Reply from 192.168.20.3: bytes=32 time=2ms TTL=126
Reply from 192.168.20.3: bytes=32 time=1ms TTL=126

Ping statistics for 192.168.20.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 1ms, Maximum = 2ms, Average = 1ms

C:\>ping 192.168.20.3

Pinging 192.168.20.3 with 32 bytes of data:
Reply from 192.168.20.3: bytes=32 time=2ms TTL=126
Reply from 192.168.20.3: bytes=32 time=1ms TTL=126
Reply from 192.168.20.3: bytes=32 time=1ms TTL=126
Reply from 192.168.20.3: bytes=32 time=4ms TTL=126

Ping statistics for 192.168.20.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 1ms, Maximum = 4ms, Average = 2ms

C:\>
```

☐ Top

Ping dari Pc2=IP-192.168.20.3 Ke Pc0=IP-192.168.10.3

PC2

Physical Config Desktop Programming Attributes

Command Prompt

```
Pinging 192.168.10.3 with 32 bytes of data:
Reply from 192.168.10.3: bytes=32 time=3ms TTL=126
Reply from 192.168.10.3: bytes=32 time=2ms TTL=126
Reply from 192.168.10.3: bytes=32 time=1ms TTL=126
Reply from 192.168.10.3: bytes=32 time=1ms TTL=126

Ping statistics for 192.168.10.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 1ms, Maximum = 3ms, Average = 1ms

C:\>ping 192.168.10.3

Pinging 192.168.10.3 with 32 bytes of data:
Reply from 192.168.10.3: bytes=32 time=1ms TTL=126
Reply from 192.168.10.3: bytes=32 time=1ms TTL=126
Reply from 192.168.10.3: bytes=32 time=2ms TTL=126
Reply from 192.168.10.3: bytes=32 time=2ms TTL=126

Ping statistics for 192.168.10.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 1ms, Maximum = 2ms, Average = 1ms

C:\>
```

☐ Top

Ping dari Pc2=IP-192.168.20.3 Ke Pc1=IP-192.168.30.3

PC2

Physical Config Desktop Programming Attributes

Command Prompt

```
Pinging 192.168.30.3 with 32 bytes of data:
Reply from 192.168.30.3: bytes=32 time=2ms TTL=126
Reply from 192.168.30.3: bytes=32 time=2ms TTL=126
Reply from 192.168.30.3: bytes=32 time=1ms TTL=126
Reply from 192.168.30.3: bytes=32 time=1ms 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 = 2ms, Average = 1ms

C:\>ping 192.168.30.3

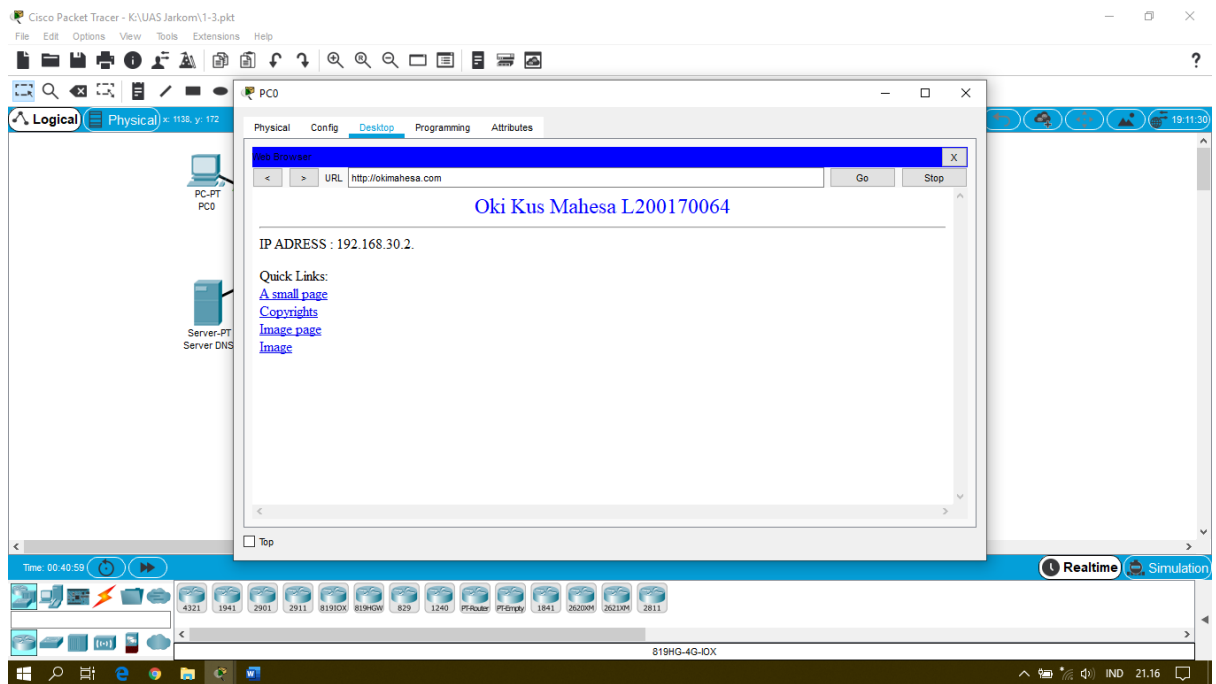
Pinging 192.168.30.3 with 32 bytes of data:
Reply from 192.168.30.3: bytes=32 time=1ms TTL=126
Reply from 192.168.30.3: bytes=32 time=2ms TTL=126
Reply from 192.168.30.3: bytes=32 time=1ms TTL=126
Reply from 192.168.30.3: bytes=32 time=2ms TTL=126

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 = 2ms, Average = 1ms

C:\>
```

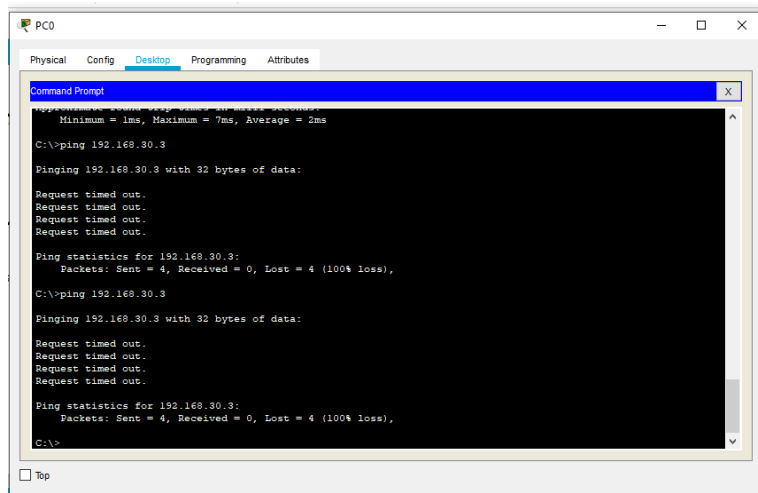
☐ Top

Meminta Layanan Ke Server

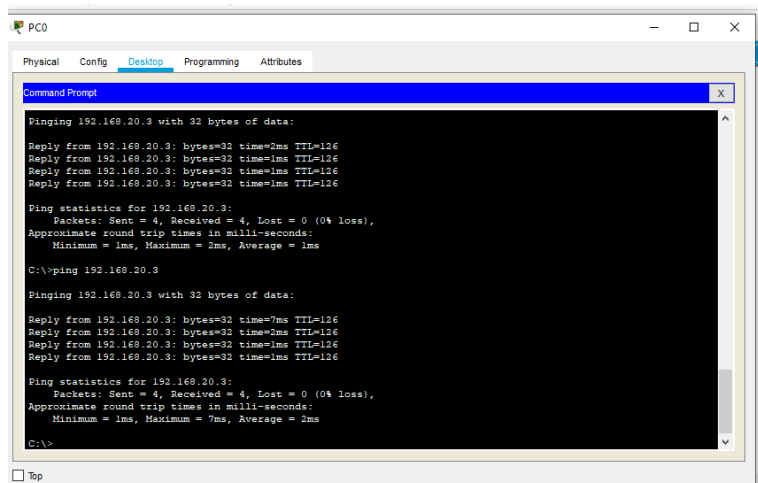


5. Menggunakan Acces list, batasi hanya pc 2 saja yang bisa mengakses server dhcp!

Ping dari Pc0=IP-192.168.10.3 Ke Pc1=IP-192.168.30.3



Ping dari Pc0=IP-192.168.10.3 Ke Pc2=IP-192.168.20.3



PC0

Physical Config Desktop Programming Attributes

Command Prompt

```
Pinging 192.168.20.3 with 32 bytes of data:
Reply from 192.168.20.3: bytes=32 time=2ms TTL=126
Reply from 192.168.20.3: bytes=32 time=1ms TTL=126
Reply from 192.168.20.3: bytes=32 time=1ms TTL=126
Reply from 192.168.20.3: bytes=32 time=1ms TTL=126

Ping statistics for 192.168.20.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 1ms, Maximum = 2ms, Average = 1ms

C:\>ping 192.168.20.3

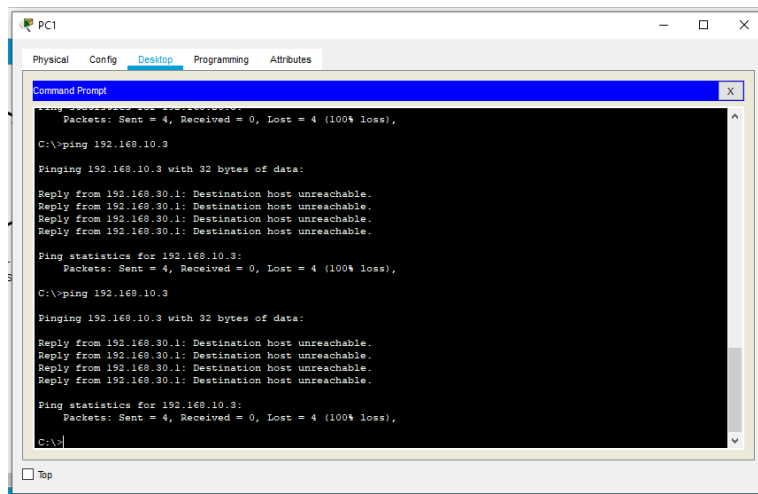
Pinging 192.168.20.3 with 32 bytes of data:
Reply from 192.168.20.3: bytes=32 time=7ms TTL=126
Reply from 192.168.20.3: bytes=32 time=2ms TTL=126
Reply from 192.168.20.3: bytes=32 time=1ms TTL=126
Reply from 192.168.20.3: bytes=32 time=1ms TTL=126

Ping statistics for 192.168.20.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 1ms, Maximum = 7ms, Average = 2ms

C:\>
```

☐ Top

Ping dari Pc1=IP-192.168.30.3 Ke Pc0=IP-192.168.10.3



PC1

Physical Config Desktop Programming Attributes

Command Prompt

```
Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

C:\>ping 192.168.10.3

Pinging 192.168.10.3 with 32 bytes of data:
Reply from 192.168.30.1: Destination host unreachable.
Reply from 192.168.30.1: Destination host unreachable.
Reply from 192.168.30.1: Destination host unreachable.
Reply from 192.168.30.1: Destination host unreachable.

Ping statistics for 192.168.10.3:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

C:\>ping 192.168.10.3

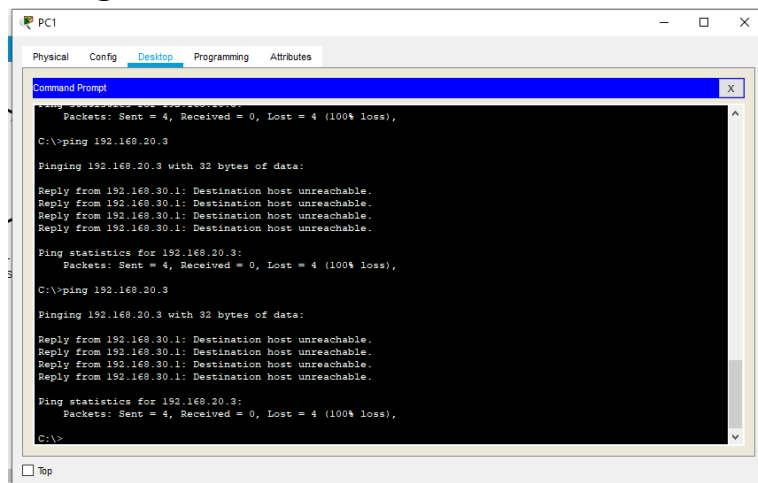
Pinging 192.168.10.3 with 32 bytes of data:
Reply from 192.168.30.1: Destination host unreachable.
Reply from 192.168.30.1: Destination host unreachable.
Reply from 192.168.30.1: Destination host unreachable.
Reply from 192.168.30.1: Destination host unreachable.

Ping statistics for 192.168.10.3:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

C:\>
```

☐ Top

Ping dari Pc1=IP-192.168.30.3 Ke Pc2=IP-192.168.20.3



PC1

Physical Config Desktop Programming Attributes

Command Prompt

```
Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

C:\>ping 192.168.20.3

Pinging 192.168.20.3 with 32 bytes of data:
Reply from 192.168.30.1: Destination host unreachable.
Reply from 192.168.30.1: Destination host unreachable.
Reply from 192.168.30.1: Destination host unreachable.
Reply from 192.168.30.1: Destination host unreachable.

Ping statistics for 192.168.20.3:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

C:\>ping 192.168.20.3

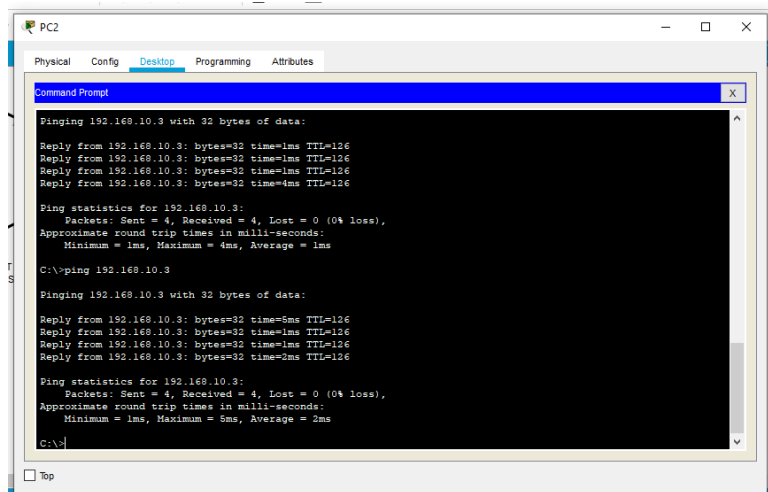
Pinging 192.168.20.3 with 32 bytes of data:
Reply from 192.168.30.1: Destination host unreachable.
Reply from 192.168.30.1: Destination host unreachable.
Reply from 192.168.30.1: Destination host unreachable.
Reply from 192.168.30.1: Destination host unreachable.

Ping statistics for 192.168.20.3:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

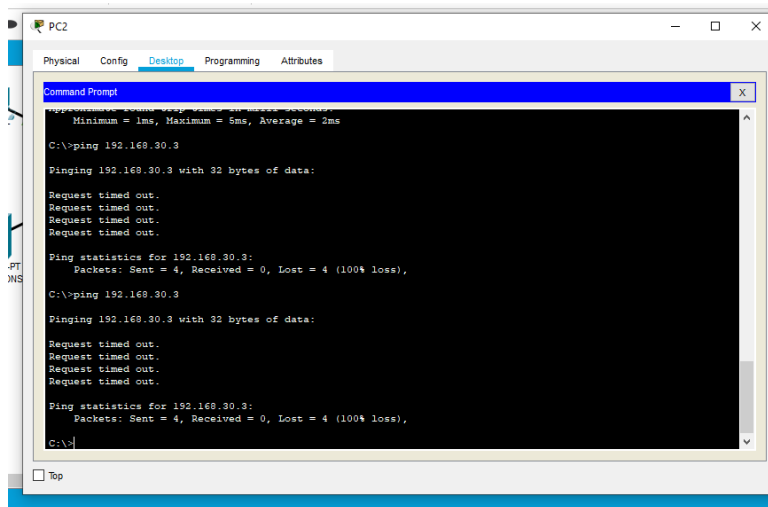
C:\>
```

☐ Top

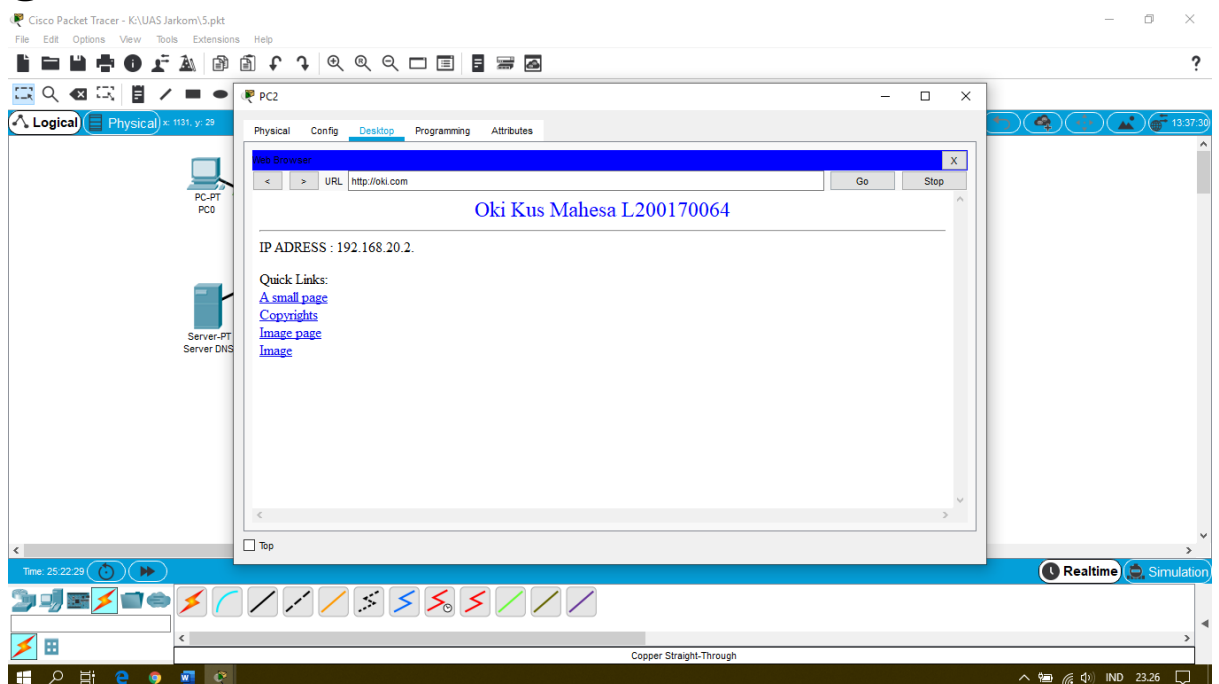
Ping dari Pc2=IP-192.168.20.3 Ke Pc0=IP-192.168.10.3



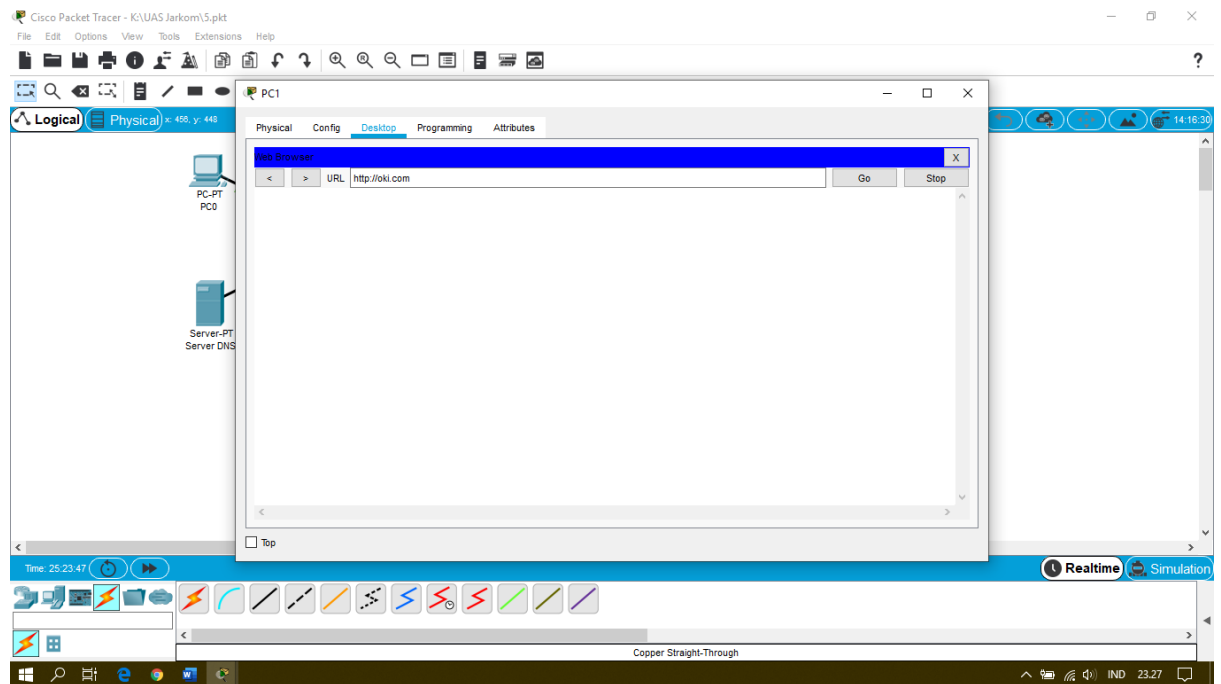
Ping dari Pc2=IP-192.168.20.3 Ke Pc1=IP-192.168.30.3



Hanya Server 2 Yang Bisa Akses Server DHCP
@ Test Pc2 Ke Server DHCP



@ Test Pc1 Ke Server DHCP



`Tidak muncul apa apa karena di access-list