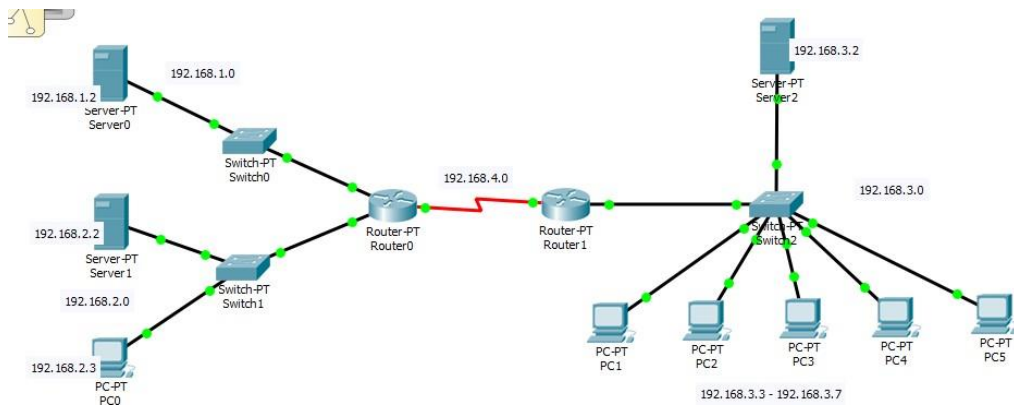


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### ➤ Desain jaringan



### ➤ Konfigurasi Server 0

- IP configuration

Server0

Physical Config Services Desktop Programming Attributes

IP Configuration

IP Configuration

☐ DHCP ☒ Static

IP Address: 192.168.1.2

Subnet Mask: 255.255.255.0

Default Gateway: 192.168.1.1

DNS Server: 0.0.0.0

IPv6 Configuration

☐ DHCP ☐ Auto Config ☒ Static

IPv6 Address: /

Link Local Address: FE80::2D0:58FF:FEB8:6AE5

IPv6 Gateway:

IPv6 DNS Server:

☐ Top

## b. konfigurasi DNS Server

The screenshot shows the 'Server0' configuration window with the 'Services' tab selected. On the left, a list of services includes HTTP, DHCP, DHCPv6, TFTP, DNS, SYSLOG, AAA, NTP, EMAIL, FTP, IoT, and VM Management. The 'DNS' service is selected. The main area shows the 'DNS' configuration with the 'DNS Service' toggle set to 'On'. Below this, the 'Resource Records' section has a 'Name' field, a 'Type' dropdown set to 'A Record', and an 'Address' field. At the bottom, there are 'Add', 'Save', and 'Remove' buttons. A table lists the current resource records:

| No. | Name                | Type     | Detail      |
|-----|---------------------|----------|-------------|
| 0   | informatika.ums.com | A Record | 192.168.2.2 |
| 1   | ums.com             | A Record | 192.168.1.2 |

## ➤ Konfigurasi Server 1

The screenshot shows the 'Server1' configuration window with the 'Desktop' tab selected. A sub-window titled 'IP Configuration' is open, showing the 'IP Configuration' section. The 'Static' radio button is selected. The fields are filled with the following values:

- IP Address: 192.168.2.2
- Subnet Mask: 255.255.255.0
- Default Gateway: 192.168.2.1
- DNS Server: 0.0.0.0

Below this, the 'IPv6 Configuration' section is visible. The 'Static' radio button is selected. The fields are filled with the following values:

- IPv6 Address: (empty) / (empty)
- Link Local Address: FE80::230:A3FF:FE95:5E54
- IPv6 Gateway: (empty)
- IPv6 DNS Server: (empty)

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

#### 4. Konfigurasi PC 0

The screenshot shows the configuration window for PC0. The 'Config' tab is selected, and the 'IP Configuration' sub-tab is active. The 'IP Configuration' section has 'Static' selected, with fields for IP Address (192.168.2.3), Subnet Mask (255.255.255.0), Default Gateway (192.168.2.1), and DNS Server (192.168.1.2). The 'IPv6 Configuration' section has 'Static' selected, with fields for IPv6 Address (empty), Link Local Address (FE80::202:16FF:FE81:739B), IPv6 Gateway (empty), and IPv6 DNS Server (empty). A 'Top' button is at the bottom left.

| IP Configuration           |   |
|----------------------------|---|
| <input type="radio"/> DHCP | <input checked="" type="radio"/> Static |
| IP Address                 | 192.168.2.3                             |
| Subnet Mask                | 255.255.255.0                           |
| Default Gateway            | 192.168.2.1                             |
| DNS Server                 | 192.168.1.2                             |

| IPv6 Configuration         |                                   |   |
|----------------------------|-----------------------------------|---|
| <input type="radio"/> DHCP | <input type="radio"/> Auto Config | <input checked="" type="radio"/> Static |
| IPv6 Address               |                                   |   |
| Link Local Address         | FE80::202:16FF:FE81:739B          |   |
| IPv6 Gateway               |                                   |   |
| IPv6 DNS Server            |                                   |   |

#### ➤ Konfigurasi Server 2

##### a. konfigurasi ip

The screenshot shows the configuration window for Server2. The 'Config' tab is selected, and the 'IP Configuration' sub-tab is active. The 'IP Configuration' section has 'Static' selected, with fields for IP Address (192.168.3.2), Subnet Mask (255.255.255.0), Default Gateway (192.168.3.1), and DNS Server (0.0.0.0). The 'IPv6 Configuration' section has 'Static' selected, with fields for IPv6 Address (empty), Link Local Address (FE80::209:7CFF:FE12:2879), IPv6 Gateway (empty), and IPv6 DNS Server (empty). A 'Top' button is at the bottom left.

| IP Configuration           |   |
|----------------------------|---|
| <input type="radio"/> DHCP | <input checked="" type="radio"/> Static |
| IP Address                 | 192.168.3.2                             |
| Subnet Mask                | 255.255.255.0                           |
| Default Gateway            | 192.168.3.1                             |
| DNS Server                 | 0.0.0.0                                 |

| IPv6 Configuration         |                                   |   |
|----------------------------|-----------------------------------|---|
| <input type="radio"/> DHCP | <input type="radio"/> Auto Config | <input checked="" type="radio"/> Static |
| IPv6 Address               |                                   |   |
| Link Local Address         | FE80::209:7CFF:FE12:2879          |   |
| IPv6 Gateway               |                                   |   |
| IPv6 DNS Server            |                                   |   |

## b. Konfigurasi DHCP

The screenshot shows the DHCP configuration window for a device named 'Server2'. The 'Services' tab is active, and the 'FastEthernet0' interface is selected. The DHCP service is turned 'On'. The configuration includes a pool named 'serverPool' with a default gateway of 192.168.3.1 and a DNS server of 192.168.1.2. The IP range is 192.168.3.3 to 192.168.3.255 with a subnet mask of 255.255.255.0. The maximum number of users is 10, and the TFTP and WLC addresses are 0.0.0.0.

| Pool Name  | Default Gateway | DNS Server  | Start IP Address | Subnet Mask   | Max User | TFTP Server | WLC Address |
|------------|-----------------|-------------|------------------|---------------|----------|-------------|-------------|
| serverPool | 192.168.3.1     | 192.168.1.2 | 192.168.3.3      | 255.255.255.0 | 10       | 0.0.0.0     | 0.0.0.0     |

## ➤ Konfigurasi PC

### a. PC1

The screenshot shows the IP Configuration window for a device named 'PC1'. The 'Desktop' tab is active. The 'IP Configuration' section shows 'DHCP' selected. The IP Address is 192.168.3.3, Subnet Mask is 255.255.255.0, Default Gateway is 192.168.3.1, and DNS Server is 192.168.1.2. The 'IPv6 Configuration' section shows 'Static' selected, with a Link Local Address of FE80::201:42FF:FED9:B175.

| Field              | Value                    |
|--------------------|--------------------------|
| IP Address         | 192.168.3.3              |
| Subnet Mask        | 255.255.255.0            |
| Default Gateway    | 192.168.3.1              |
| DNS Server         | 192.168.1.2              |
| IPv6 Address       |                          |
| Link Local Address | FE80::201:42FF:FED9:B175 |
| IPv6 Gateway       |                          |
| IPv6 DNS Server    |                          |

## b. PC 5

The screenshot shows the 'PC5' configuration window with the 'Config' tab selected. The 'IP Configuration' section is active, showing 'DHCP' selected. The 'IPv6 Configuration' section shows 'Static' selected. The fields are filled with the following values:

| Field              | Value                    |
|--------------------|--------------------------|
| IP Address         | 192.168.3.7              |
| Subnet Mask        | 255.255.255.0            |
| Default Gateway    | 192.168.3.1              |
| DNS Server         | 192.168.1.2              |
| IPv6 Address       |                          |
| Link Local Address | FE80::290:2BFF:FE60:5084 |
| IPv6 Gateway       |                          |
| IPv6 DNS Server    |                          |

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

## ➤ Konfigurasi Router 0

### a. fa 0/0

The screenshot shows the 'Router0' configuration window with the 'Config' tab selected. The 'FastEthernet0/0' interface is selected in the left sidebar. The configuration details for this interface are shown on the right:

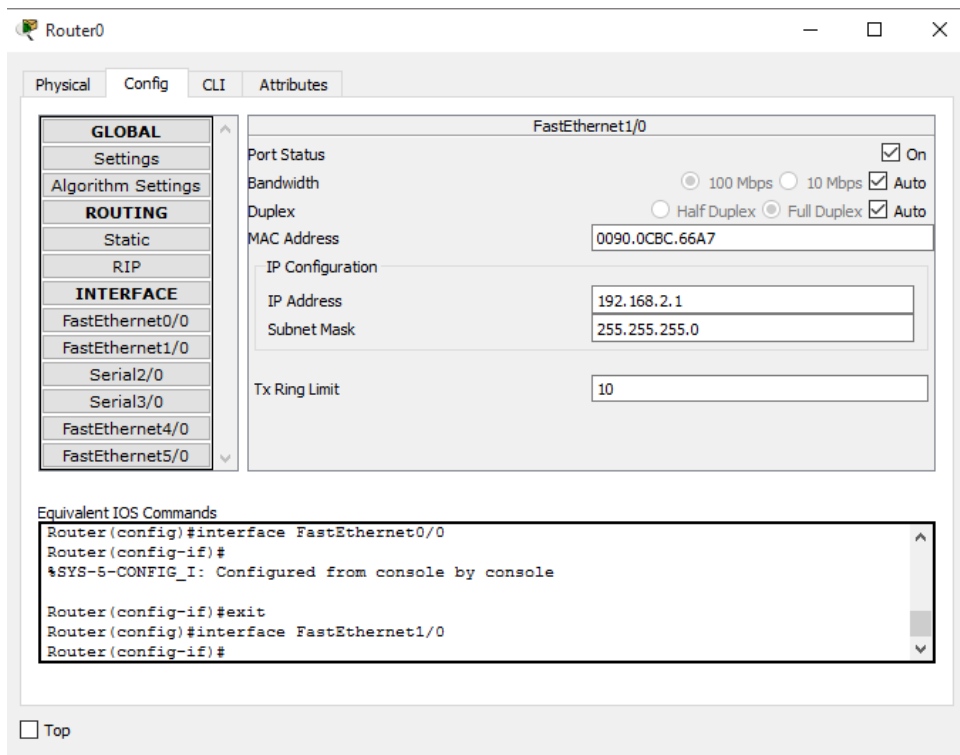
| Field            | Value   |
|------------------|---|
| Port Status      | <input checked="" type="checkbox"/> On  |
| Bandwidth        | <input checked="" type="radio"/> 100 Mbps <input type="radio"/> 10 Mbps <input checked="" type="checkbox"/> Auto        |
| Duplex           | <input type="radio"/> Half Duplex <input checked="" type="radio"/> Full Duplex <input checked="" type="checkbox"/> Auto |
| MAC Address      | 0001.638B.E6B0  |
| IP Configuration |   |
| IP Address       | 192.168.1.1   |
| Subnet Mask      | 255.255.255.0   |
| Tx Ring Limit    | 10  |

At the bottom, there is a section for 'Equivalent IOS Commands' with the following text:

```
Router(config-router)#end
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface FastEthernet0/0
Router(config-if)#
$SYS-5-CONFIG_I: Configured from console by console
```

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

b. fa 1/0



Router0

Physical Config CLI Attributes

**GLOBAL**

- Settings
- Algorithm Settings
- ROUTING**
- Static
- RIP
- INTERFACE**
- FastEthernet0/0
- FastEthernet1/0
- Serial2/0
- Serial3/0
- FastEthernet4/0
- FastEthernet5/0

**FastEthernet1/0**

Port Status ☒ On

Bandwidth ☐ 100 Mbps ☐ 10 Mbps ☒ Auto

Duplex ☐ Half Duplex ☒ Full Duplex ☒ Auto

MAC Address 0090.0CBC.66A7

IP Configuration

IP Address 192.168.2.1

Subnet Mask 255.255.255.0

Tx Ring Limit 10

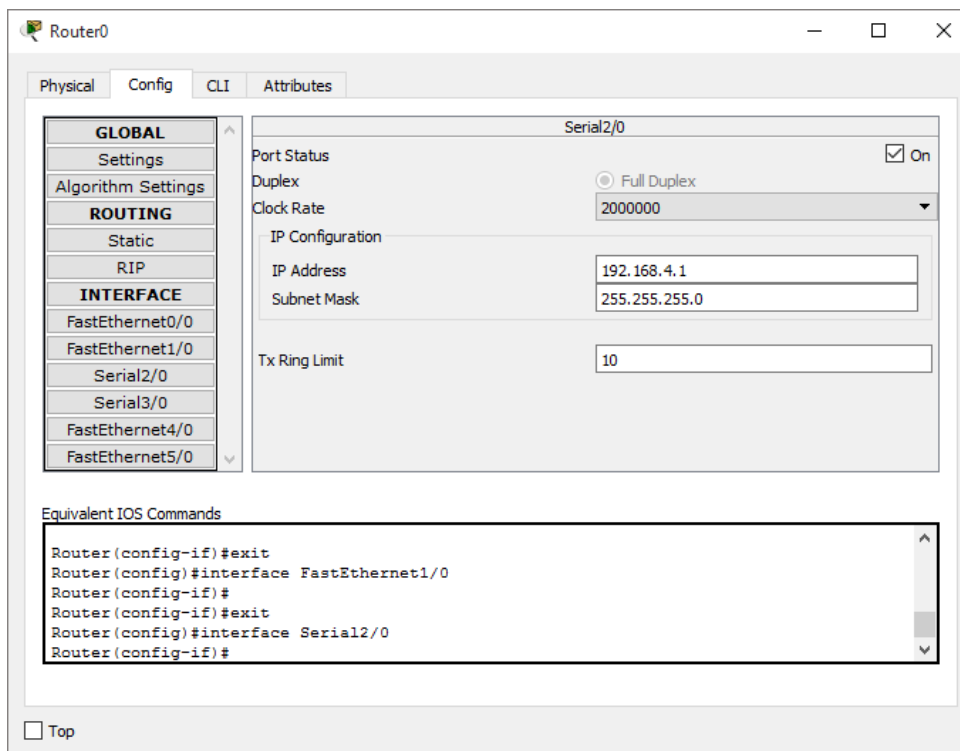
Equivalent IOS Commands

```
Router(config)#interface FastEthernet0/0
Router(config-if)#
%SYS-5-CONFIG_I: Configured from console by console

Router(config-if)#exit
Router(config)#interface FastEthernet1/0
Router(config-if)#
```

☐ Top

c. serial 2/0



Router0

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 192.168.4.1

Subnet Mask 255.255.255.0

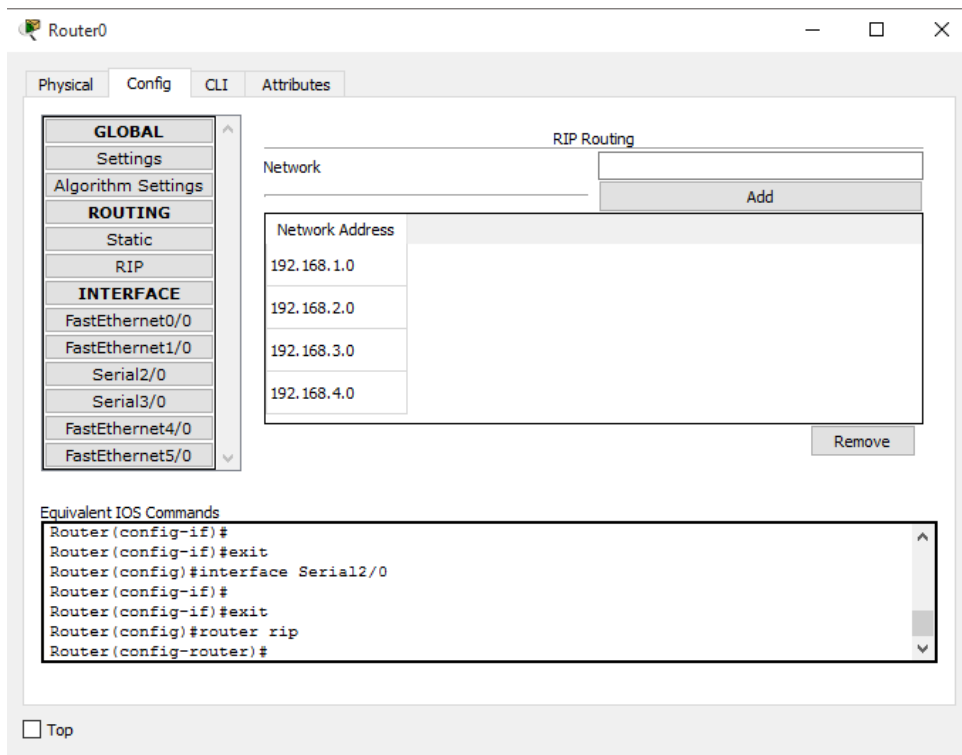
Tx Ring Limit 10

Equivalent IOS Commands

```
Router(config-if)#exit
Router(config)#interface FastEthernet1/0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface Serial2/0
Router(config-if)#
```

☐ Top

## d. Routing RIP



The screenshot shows the 'Router0' configuration window with the 'Config' tab selected. The left sidebar shows a tree view with 'GLOBAL' expanded, containing 'Settings', 'Algorithm Settings', 'ROUTING', and 'INTERFACE'. Under 'ROUTING', 'RIP' is selected. The main area is titled 'RIP Routing' and contains a 'Network' section with a text input field and an 'Add' button. Below this is a table with the following data:

| Network Address |
|-----------------|
| 192.168.1.0     |
| 192.168.2.0     |
| 192.168.3.0     |
| 192.168.4.0     |

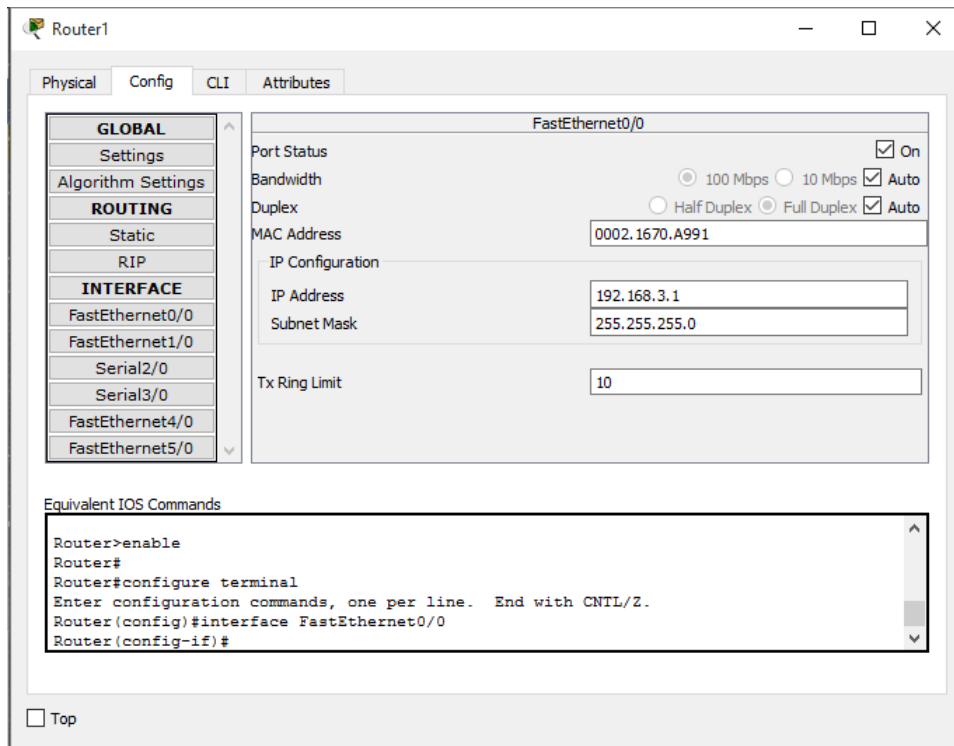
At the bottom right of the table is a 'Remove' button. Below the table is a section titled 'Equivalent IOS Commands' with a text area containing the following commands:

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

At the bottom left of the window is a 'Top' button.

## ➤ Konfigurasi Router 1

### a. fa 0/0



The screenshot shows the 'Router1' configuration window with the 'Config' tab selected. The left sidebar shows a tree view with 'INTERFACE' expanded, containing 'FastEthernet0/0', 'FastEthernet1/0', 'Serial2/0', 'Serial3/0', 'FastEthernet4/0', and 'FastEthernet5/0'. 'FastEthernet0/0' is selected. The main area is titled 'FastEthernet0/0' and contains the following configuration fields:

- Port Status: ☒ On
- Bandwidth: ☒ 100 Mbps ☐ 10 Mbps ☒ Auto
- Duplex: ☐ Half Duplex ☒ Full Duplex ☒ Auto
- MAC Address: 0002.1670.A991
- IP Configuration:
  - IP Address: 192.168.3.1
  - Subnet Mask: 255.255.255.0
- Tx Ring Limit: 10

Below the configuration fields is a section titled '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)#interface FastEthernet0/0  
Router(config-if)#
```

At the bottom left of the window is a 'Top' button.

b. se 2/0

Router1

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 1200

IP Configuration

IP Address 192.168.4.2

Subnet Mask 255.255.255.0

Tx Ring Limit 10

Equivalent IOS Commands

```
Router(config-if)#  
Router(config-if)#exit  
Router(config)#interface FastEthernet1/0  
Router(config-if)#  
Router(config-if)#exit  
Router(config)#interface Serial2/0  
Router(config-if)#
```

☐ Top

c. Routing RIP

Router1

Physical Config CLI Attributes

**GLOBAL**

- Settings
- Algorithm Settings

**ROUTING**

- Static
- RIP

**INTERFACE**

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

**RIP Routing**

Network

Add

Network Address

|             |
|-------------|
| 192.168.1.0 |
| 192.168.2.0 |
| 192.168.3.0 |
| 192.168.4.0 |

Remove

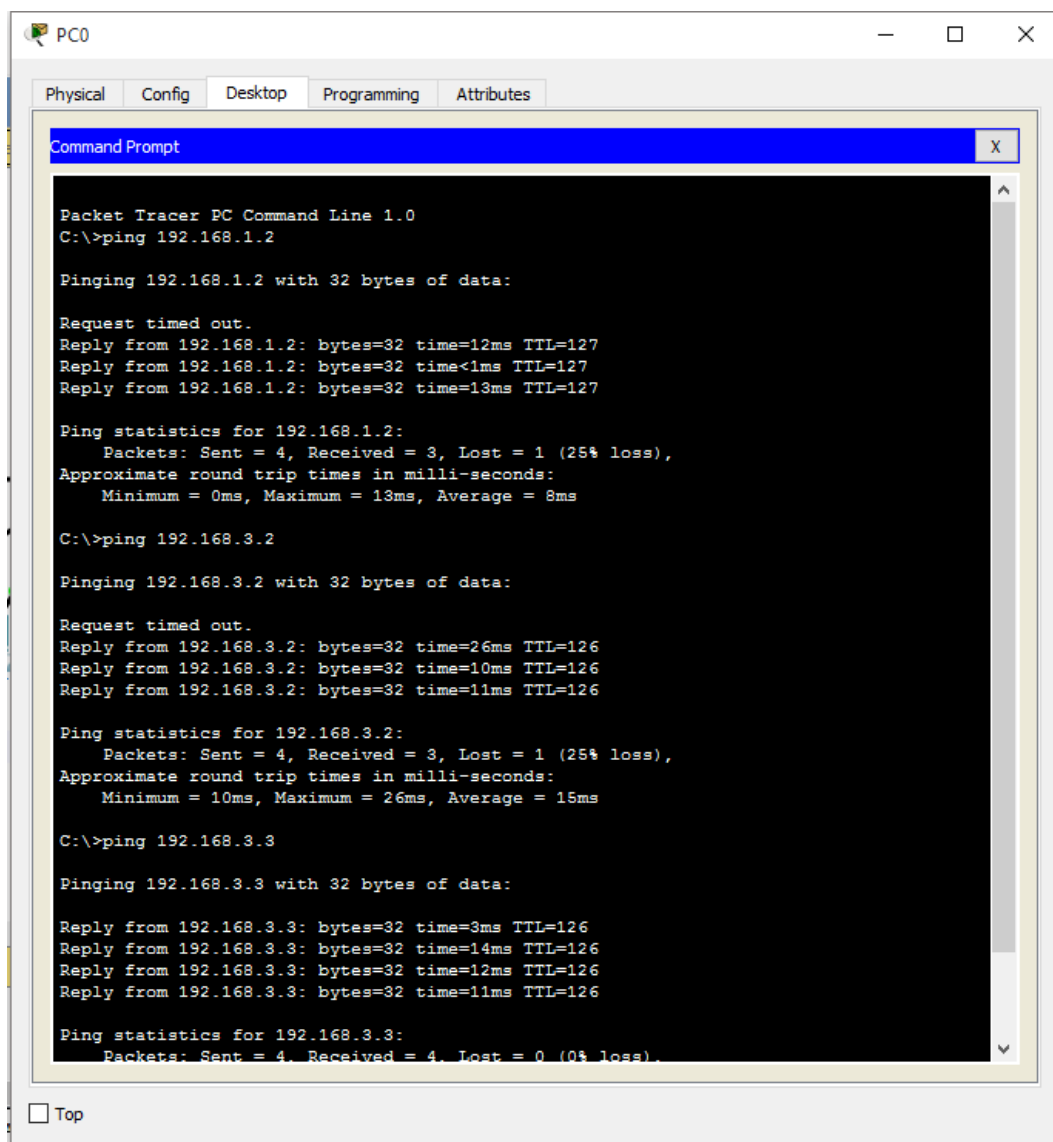
Equivalent IOS Commands

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

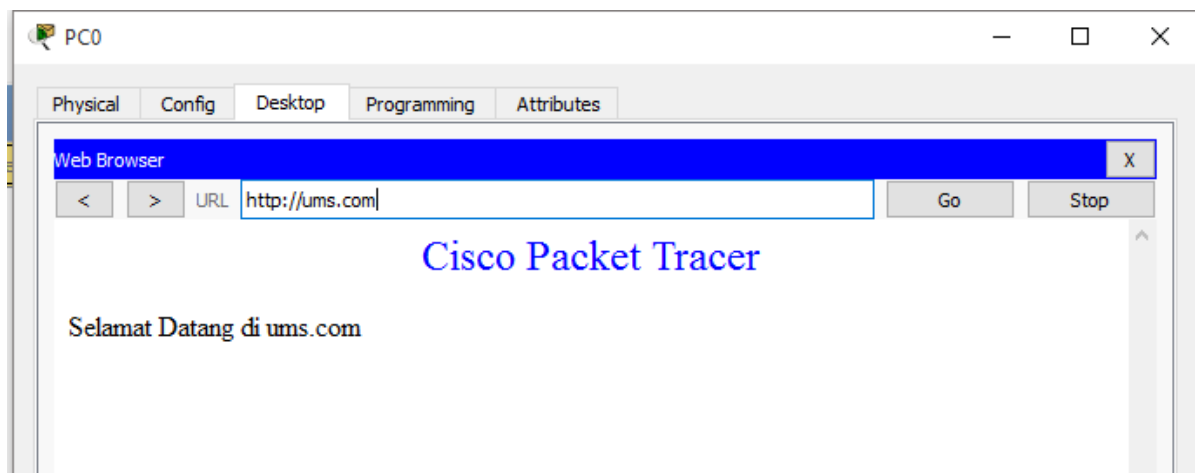
☐ Top

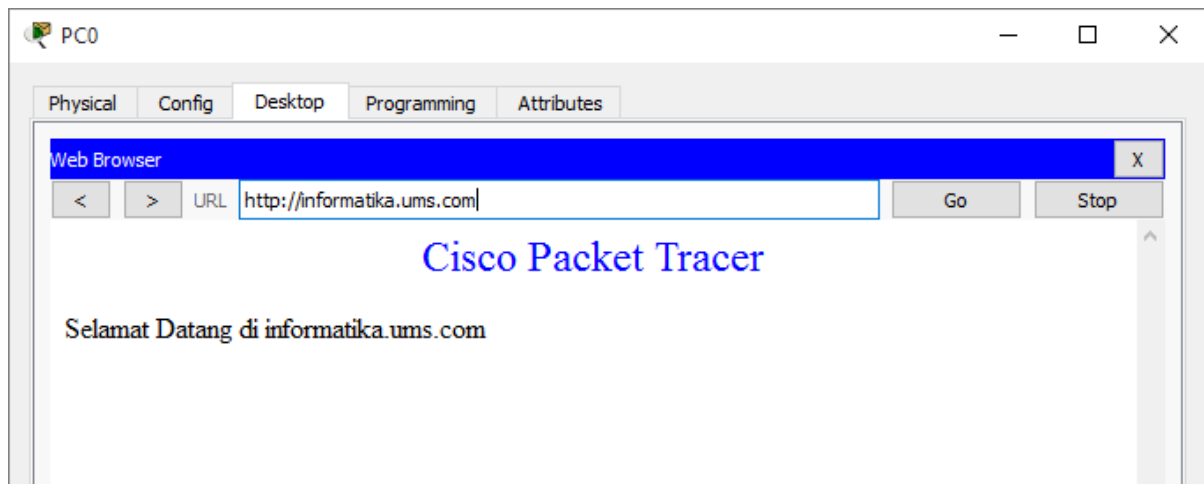


## 9. Melakukan Ping dari PC 0

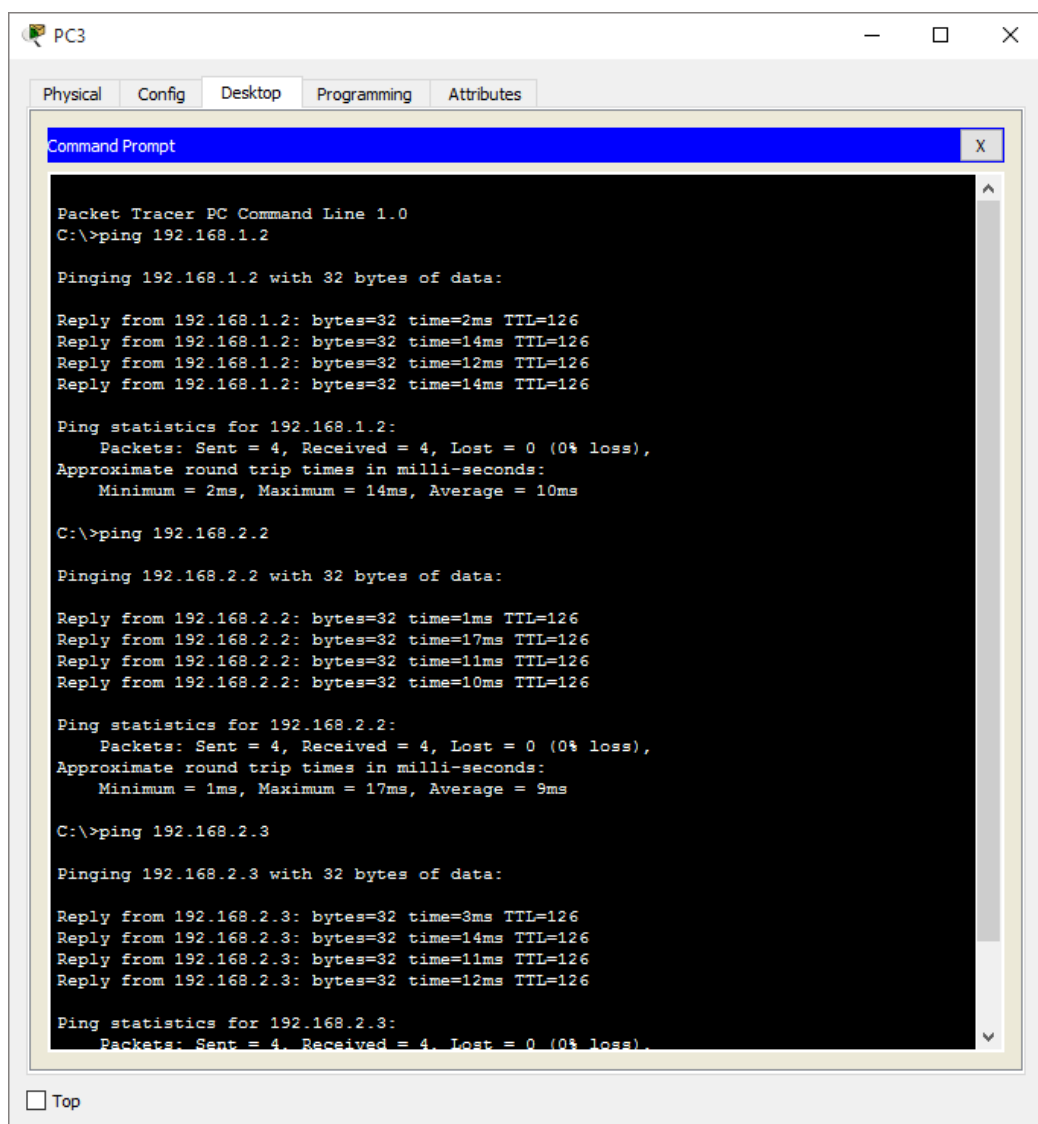


## 10. Melihat lewat browser





11. Melakukan ping dari PC 3 (Network 192.168.3.0)



## 12. Membuka lewat browser (DNS)

