

## **LAPORAN AKHIR PRAKTIKUM**

Mata Praktikum : Jaringan Komputer  
Kelas : 3IA02  
Praktikum ke- : 4  
Tanggal : 2/11/22  
Materi : Routing Static  
NPM : 50420562  
Nama : Ibrahim Bramullah  
Ketua Asisten : David  
Paraf Asisten :  
Nama Asisten :  
Jumlah Lembar : 17 Lembar

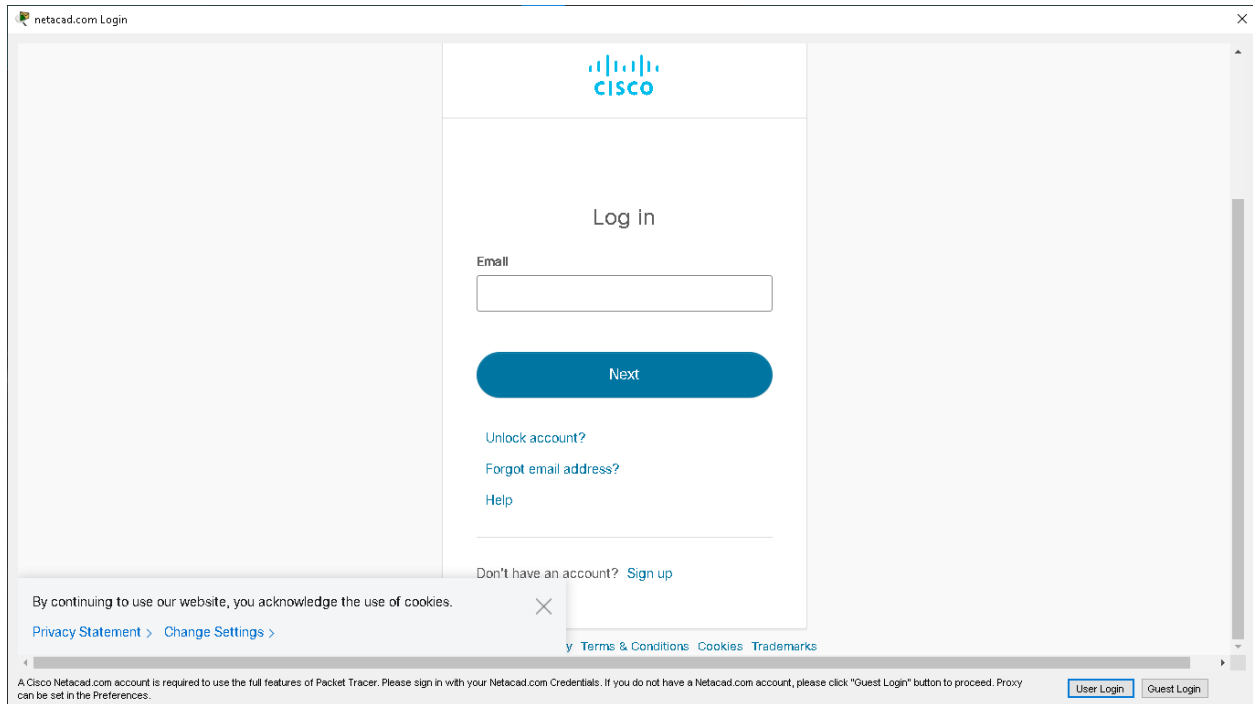
**LABORATORIUM TEKNIK INFORMATIKA**

**UNIVERSITAS GUNADARMA**

**2022**

Soal : Buatlah laporan berisikan Screenshot dan langkah-langkah yang dilakukan seperti pada video/activity

### ~~Guest Login



netacad.com Login

**cisco**

Log in

Email

Next

[Unlock account?](#)

[Forgot email address?](#)

[Help](#)

Don't have an account? [Sign up](#)

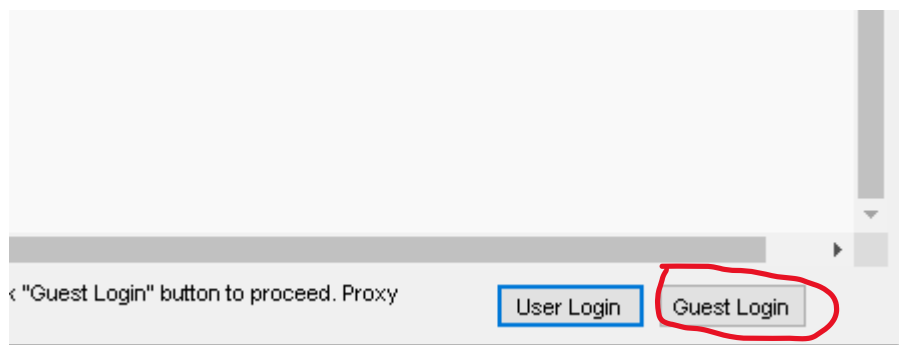
By continuing to use our website, you acknowledge the use of cookies.

[Privacy Statement](#) > [Change Settings](#) >

[Terms & Conditions](#) [Cookies](#) [Trademarks](#)

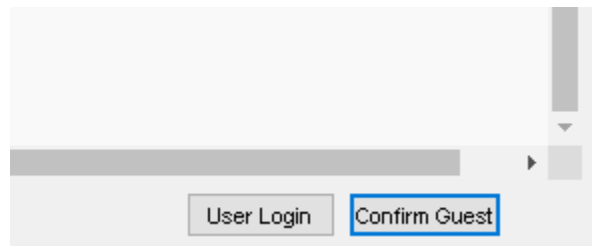
A Cisco Netacad.com account is required to use the full features of Packet Tracer. Please sign in with your Netacad.com Credentials. If you do not have a Netacad.com account, please click "Guest Login" button to proceed. Proxy can be set in the Preferences.

[User Login](#) [Guest Login](#)

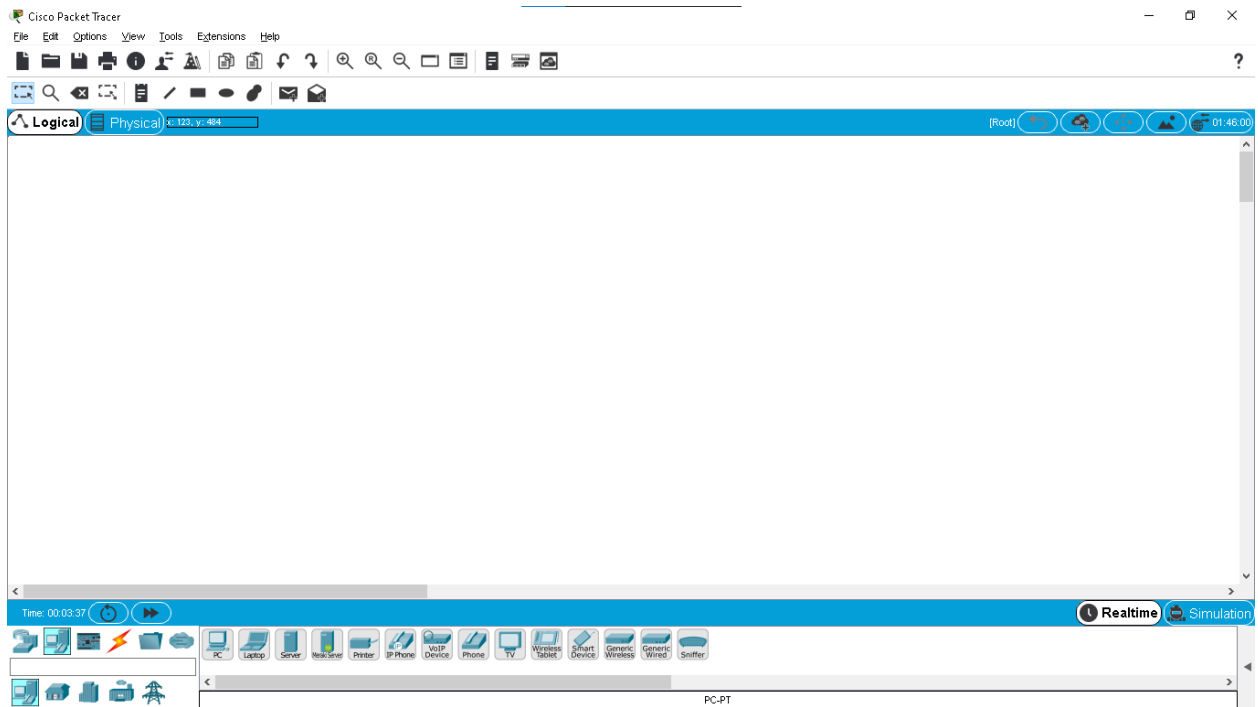


< "Guest Login" button to proceed. Proxy

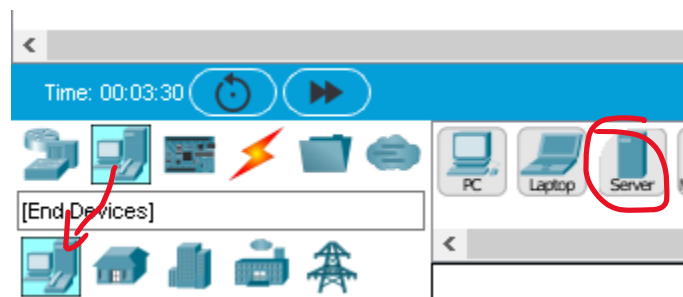
[User Login](#) [Guest Login](#)



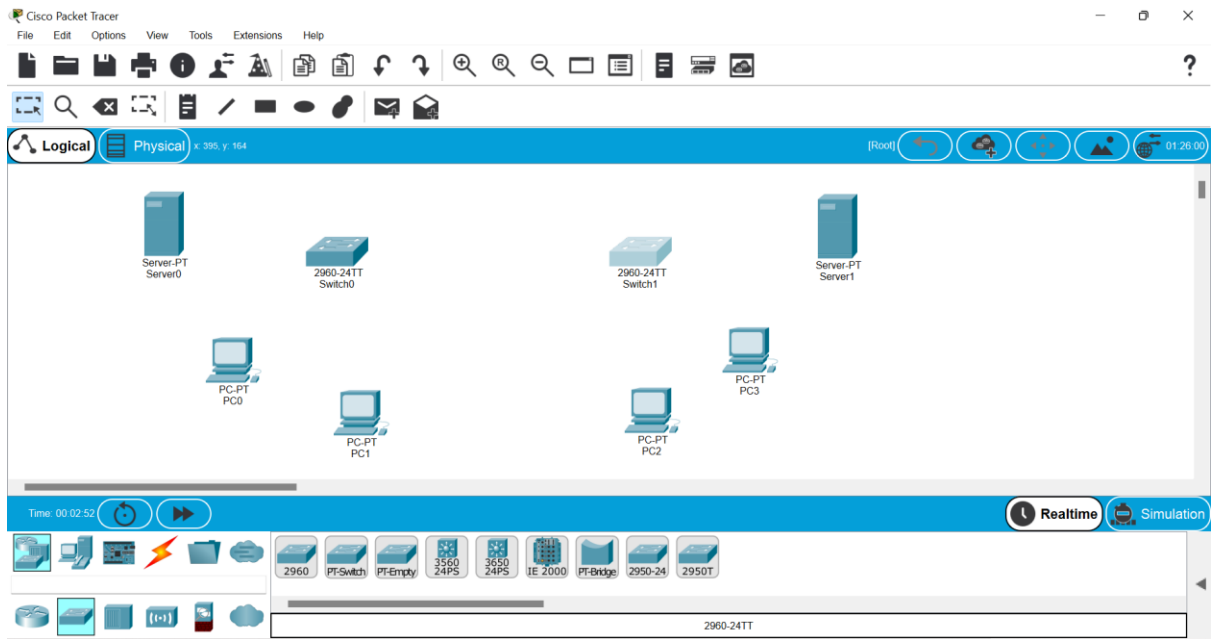
[User Login](#) [Confirm Guest](#)



~Pilih 2 Server (pada EndDevice)



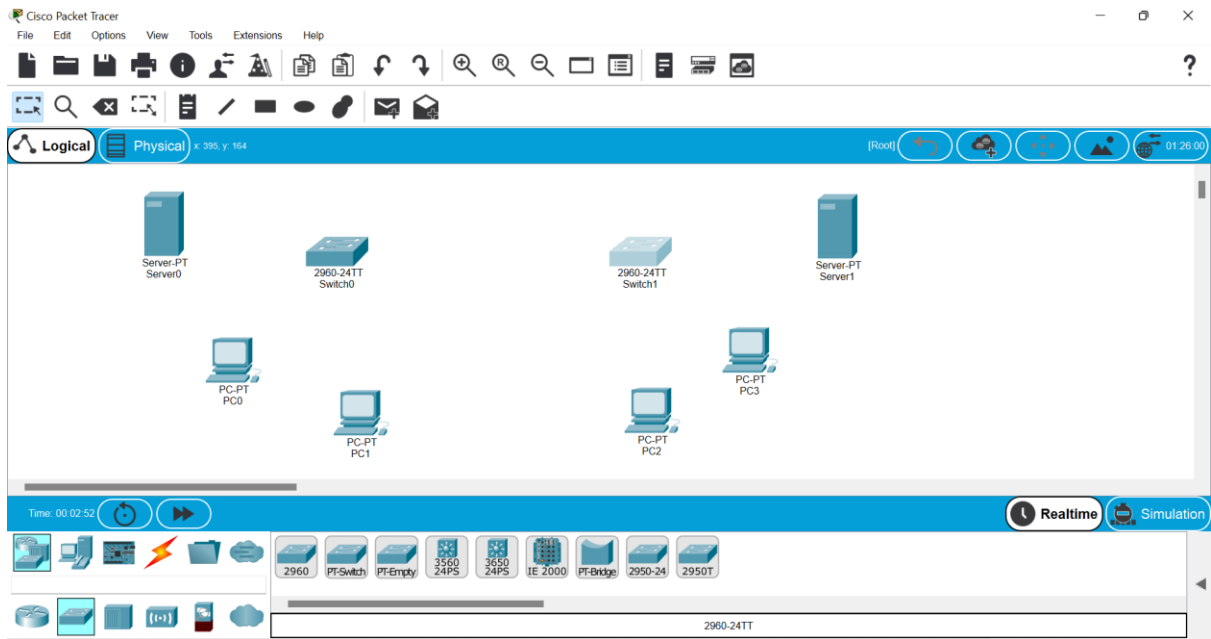
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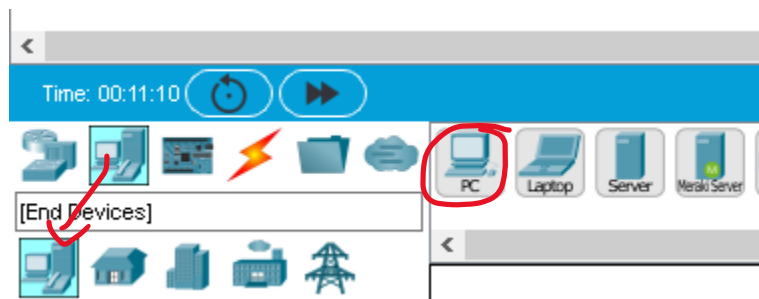
~~Pilih 2 2960 Switch (pada Switches)



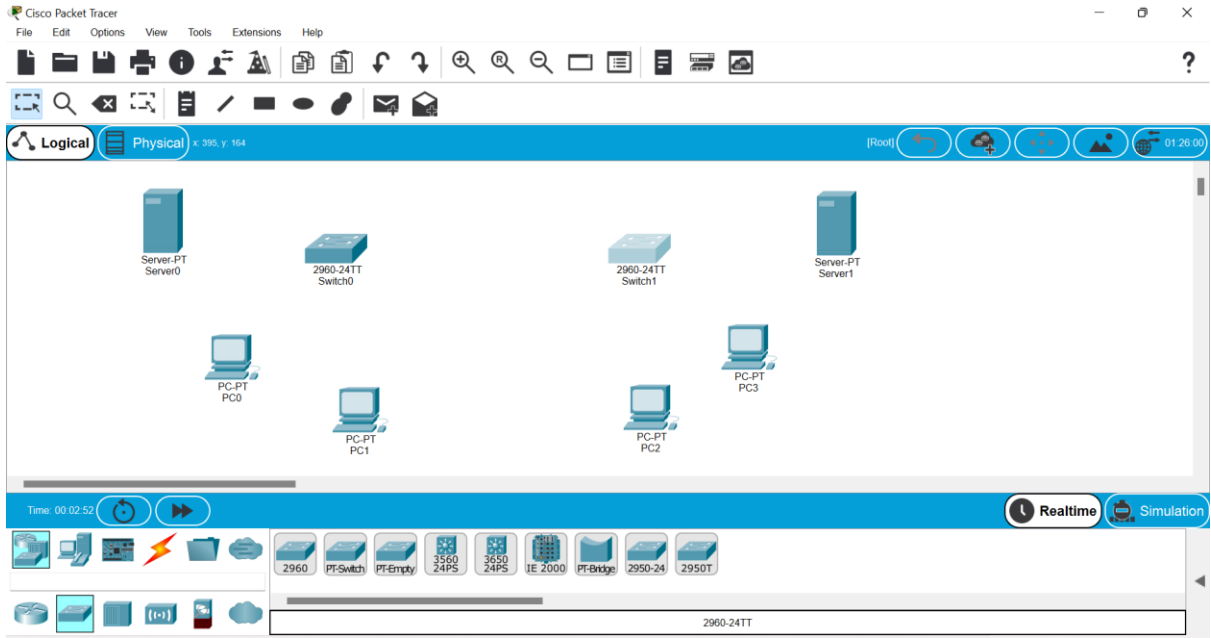
..



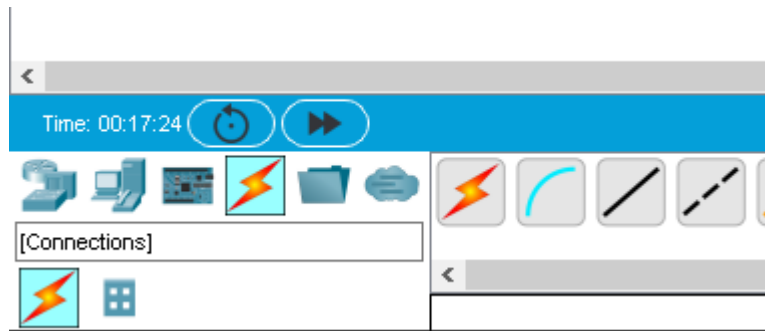
~~Pilih 4 PC (pada EndDevice)



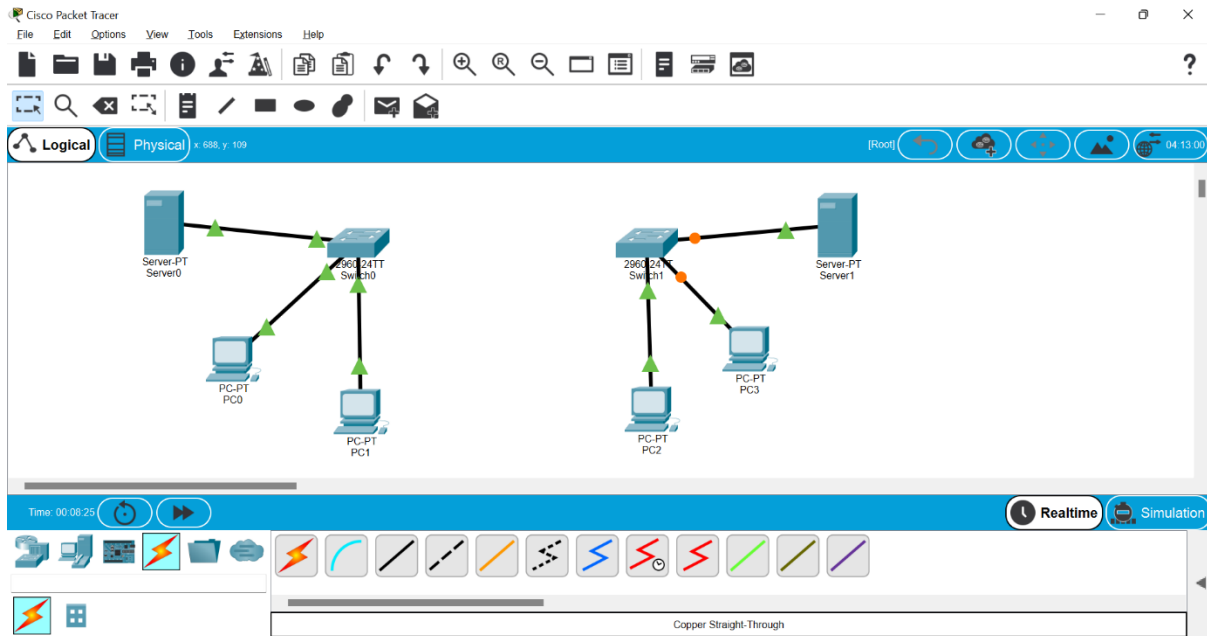
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~Pilih Cabel (pada Connection)



➤ Hubungkan Server dan PC ke Switch



## IP & DHCP Server 0

Server0

Physical Config Services **Desktop** Programming Attributes

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::260:3EFF:FE03:6380

IPv6 Gateway:

IPv6 DNS Server:

802.1X

☐ Use 802.1X Security

Authentication: MD5

Username:

Password:

☐ Top

Server0

Physical Config **Services** Desktop Programming Attributes

**SERVICES**

- HTTP
- DHCP
- DHCPv6
- TFTP
- DNS
- SYSLOG
- AAA
- NTP
- EMAIL
- FTP
- IoT
- VM Management
- Radius EAP

DHCP

Interface: FastEthernet0 Service: ☒ On ☐ Off

Pool Name: serverPool

Default Gateway: 192.168.1.1

DNS Server: 0.0.0.0

Start IP Address: 192.168.1.1

Subnet Mask: 255.255.255.0

Maximum Number of Users: 5

TFTP Server: 0.0.0.0

WLC Address: 0.0.0.0

Add Save Remove

Pool Name	Default Gateway	DNS Server	Start IP Address	Subnet Mask	Max User	TFTP Server	WLC Address
serverPool	192.168.1.1	0.0.0.0	192.168.1.1	255.255.255.0	5	0.0.0.0	0.0.0.0

☐ Top

## DCHP pada PC0 dan PC1



PC0

Physical Config **Desktop** Programming Attributes

IP Configuration X

Interface FastEthernet0

IP Configuration

☒ DHCP ☐ Static DHCP request successful

IP Address 192.168.1.5

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 FE80:230:F2FF:FEA0:C290

IPv6 Gateway

IPv6 DNS Server

802.1X

☐ Use 802.1X Security

Authentication MD5

Username

Password

Top

..

PC1

Physical Config **Desktop** Programming Attributes

IP Configuration X

Interface FastEthernet0

IP Configuration

☒ DHCP ☐ Static DHCP request successful

IP Address 192.168.1.6

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 FE80:202:17FF:FEB4:5AE5

IPv6 Gateway

IPv6 DNS Server

802.1X

☐ Use 802.1X Security

Authentication MD5

Username

Password

Top

## IP & DHCP Server 1

Server1

Physical Config Services **Desktop** Programming Attributes

**P Configuration** X

IP Configuration

☐ DHCP ☒ Static

IP Address: 192.168.2.2

Subnet Mask: 255.255.255.0

Default Gateway: 192.168.2.1

DNS Server: 0.0.0.0

IPv6 Configuration

☐ DHCP ☐ Auto Config ☒ Static

IPv6 Address: /

Link Local Address: FE80:200:FFFF:FE05:3D8B

IPv6 Gateway:

IPv6 DNS Server:

802.1X

☐ Use 802.1X Security

Authentication: MD5

Username:

Password:

☐ Top

Server1

Physical Config **Services** Desktop Programming Attributes

**SERVICES**

- HTTP
- DHCP
- DHCPv6
- TFTP
- DNS
- SYSLOG
- AAA
- NTP
- EMAIL
- FTP
- IoT
- VM Management
- Radius EAP

DHCP

Interface: FastEthernet0 Service: ☒ On ☐ Off

Pool Name: serverPool

Default Gateway: 192.168.2.1

DNS Server: 0.0.0.0

Start IP Address: 192.168.2.5

Subnet Mask: 255.255.255.0

Maximum Number of Users: 5

TFTP Server: 0.0.0.0

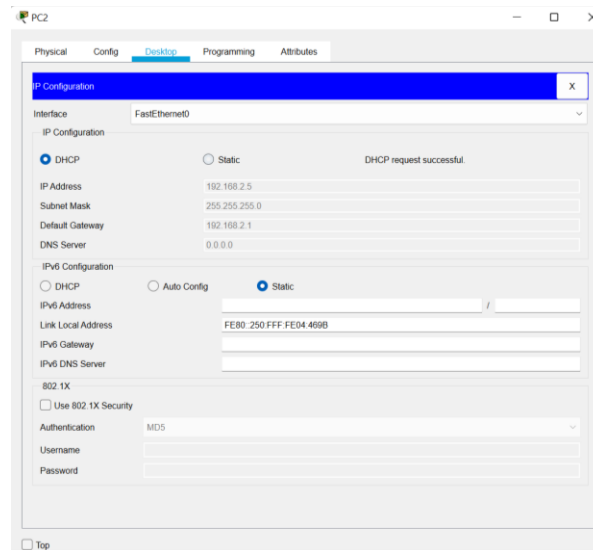
WLC Address: 0.0.0.0

Add Save Remove

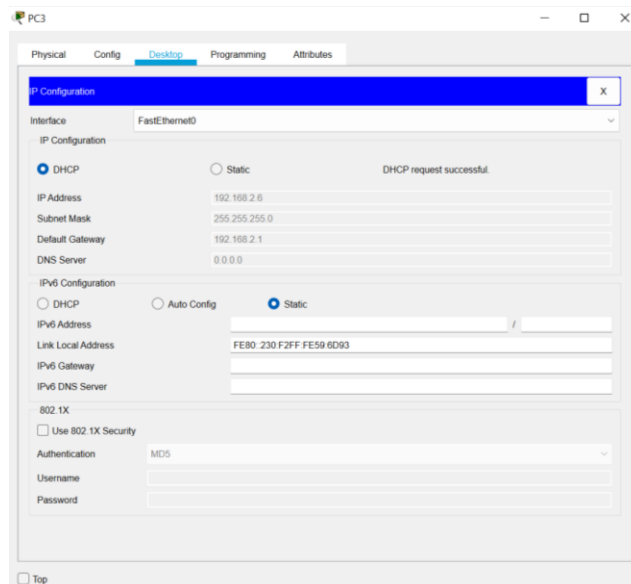
Pool Name	Default Gateway	DNS Server	Start IP Address	Subnet Mask	Max User	TFTP Server	WLC Address
serverPool	192.168.2.1	0.0.0.0	192.168.2.5	255.255.255.0	5	0.0.0.0	0.0.0.0

☐ Top

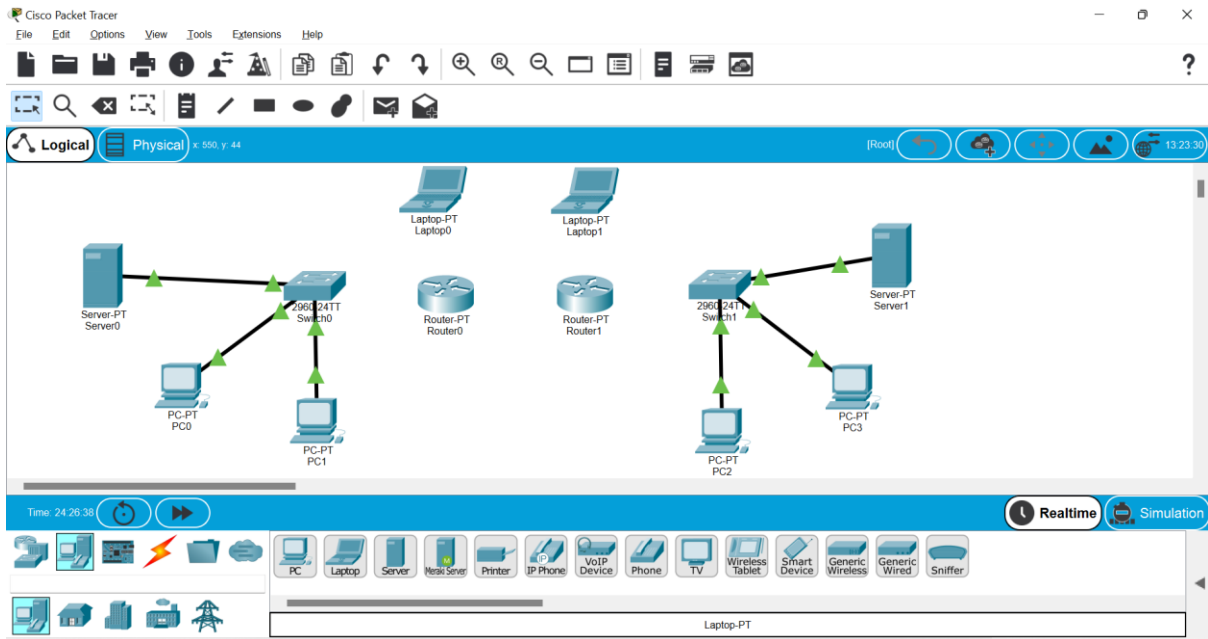
**DCHP pada PC2 dan PC3**



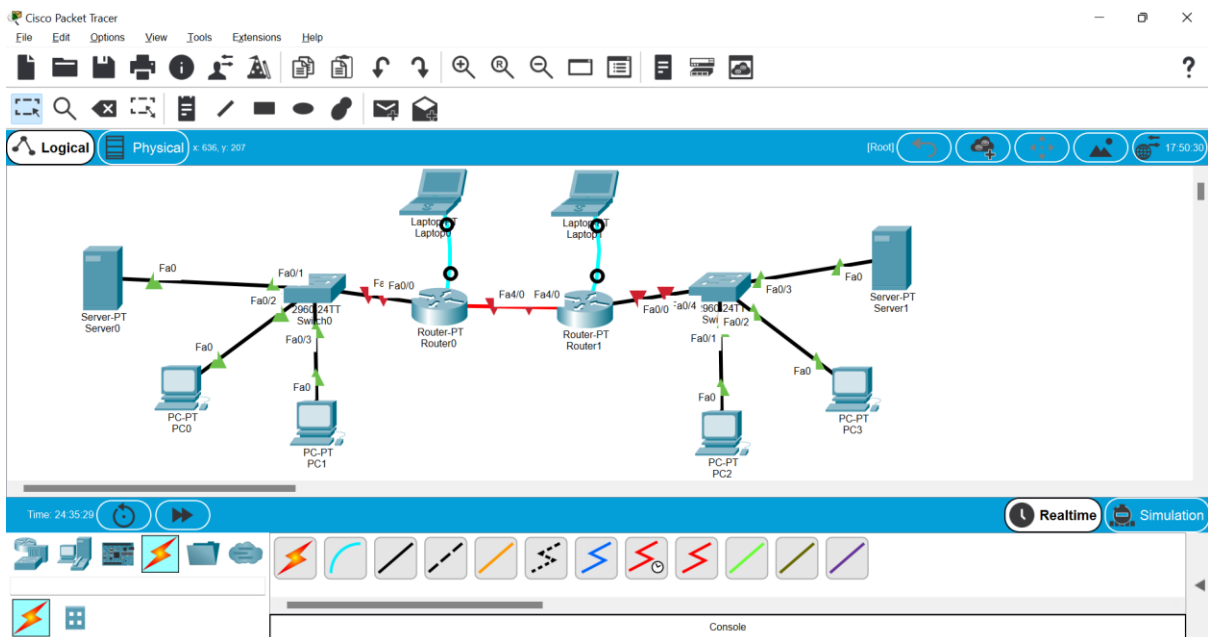
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**Tambahkan 2 Router dan 2 Laptop**

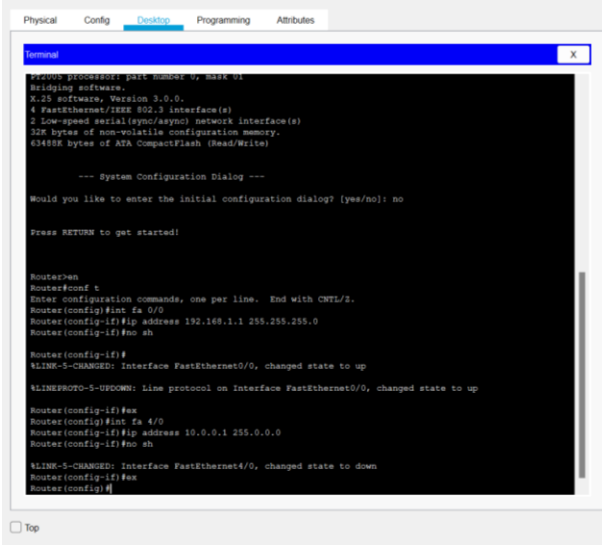


## Hubungkan



- >> Hubungkan Switch dan Router menggunakan kabel Straight.
- >> Ceklis Always Show Port Labels in Logical Workspaces.
- >> Menghubungkan Laptop pilih RS232 dengan Router pilih kabel Console.

## Laptop 0



```
Physical  Config  Docking  Programming  Attributes

Terminal

cisco processor: part number 0, base 01
bridging software.
3.25 software, version 3.0.0.
4 FastEthernet/IEEE 802.3 interface(s)
2 Low-speed serial(sync/async) network interface(s)
32K bytes of non-volatile configuration memory.
514K bytes of ATA CompactFlash (Read/Write)

--- System Configuration Dialog ---

Would you like to enter the initial configuration dialog? (yes/no): no

Press RETURN to get started!

Router>en
Router>conf t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#int fa 0/0
Router(config-if)#ip address 192.168.1.1 255.255.255.0
Router(config-if)#no sh

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)#ex
Router(config)#int fa 4/0
Router(config-if)#ip address 10.0.0.1 255.0.0.0
Router(config-if)#no sh

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

>> **Terminal** = mengatur configuration terminal dan setting fa0/0

‘cek pada Router0 dengan klik Router lalu masuk ke dalam Config’

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 0002.1724.BEAC  
IP Configuration  
IP Address 192.168.1.1  
Subnet Mask 255.255.255.0  
Tx Ring Limit 10

Equivalent IOS Commands

```

FastEthernet0/0 no shutdown
Router(config-if)#exit
Router(config)#int fa 4/0
Router(config-if)#ip address 10.0.0.1 255.0.0.0
Router(config-if)#no sh
%LINK-5-CHANGED: Interface FastEthernet4/0, changed state to down
Router(config-if)#exit
Router(config)#
Router(config)#interface FastEthernet0/0
Router(config-if)#exit
Router(config)#
Router(config)#interface FastEthernet0/0
Router(config-if)#exit
Router(config)#interface FastEthernet0/0
Router(config-if)#

```

☐ Top

..

Physical **Config** CLI Attributes

GLOBAL

Settings

Algorithm Settings

ROUTING

Static

RIP

INTERFACE

FastEthernet0/0

FastEthernet1/0

Serial2/0

Serial3/0

FastEthernet4/0

FastEthernet5/0

FastEthernet4/0

Port Status ☒ On  
MAC Address 0001.966A.8468  
IP Configuration  
IP Address 10.0.0.1  
Subnet Mask 255.0.0.0  
Tx Ring Limit 10

Equivalent IOS Commands

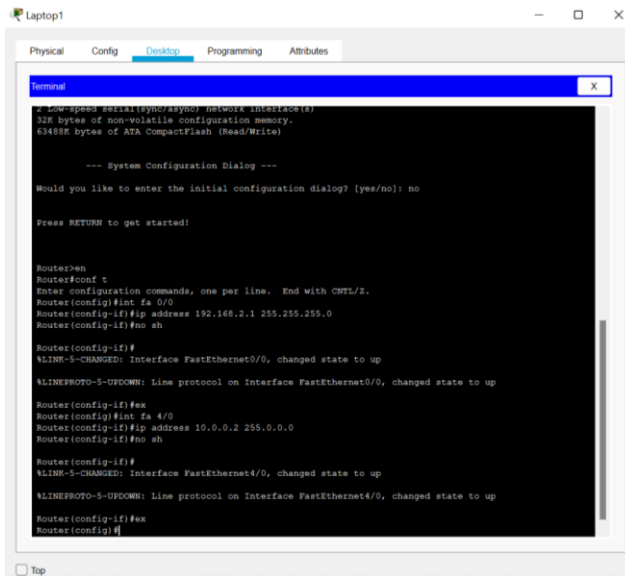
```

Router(config-if)#ip address 10.0.0.1 255.0.0.0
Router(config-if)#no sh
%LINK-5-CHANGED: Interface FastEthernet4/0, changed state to down
Router(config-if)#exit
Router(config)#
Router(config)#interface FastEthernet0/0
Router(config-if)#exit
Router(config)#
Router(config)#interface FastEthernet0/0
Router(config-if)#exit
Router(config)#interface FastEthernet0/0
Router(config-if)#exit
Router(config)#interface FastEthernet4/0
Router(config-if)#

```

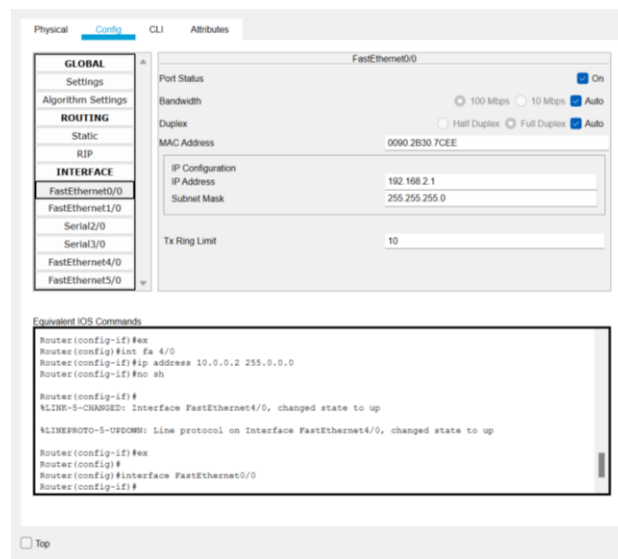
☐ Top

Laptop 1



>> **Terminal** = mengatur configuration terminal dan setting fa0/0

‘cek pada Router0 dengan klik Router lalu masuk ke dalam Config’



..

Physical **Config** CLI Attributes

GLOBAL

Settings

Algorithm Settings

ROUTING

Static

RIP

INTERFACE

FastEthernet0/0

FastEthernet1/0

Serial2/0

Serial3/0

FastEthernet4/0

FastEthernet5/0

FastEthernet4/0

Port Status

MAC Address 0001 97C8 24AC

IP Configuration

IP Address 10.0.0.2

Subnet Mask 255.0.0.0

Tx Ring Limit 10

Equivalent IOS Commands

```

Router(config-if)#no sh
Router(config-if)#
%LINK-3-CHANGED: Interface FastEthernet4/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet4/0, changed state to up
Router(config-if)#ex
Router(config)#
Router(config)#interface FastEthernet0/0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface FastEthernet4/0
Router(config-if)#

```

Top

Menghubungkan untuk mengirim data dari PC0 ke PC2

Physical **Config** CLI Attributes

GLOBAL

Settings

Algorithm Settings

ROUTING

Static

RIP

INTERFACE

FastEthernet0/0

FastEthernet1/0

Serial2/0

Serial3/0

FastEthernet4/0

FastEthernet5/0

Static Routes

Network 192.168.2.0

Mask 255.255.255.0

Next Hop 10.0.0.2

Add

Network Address 192.168.2.0/24 via 10.0.0.2

Remove

Equivalent IOS Commands

```

Router(config-if)#
%LINK-3-CHANGED: Interface FastEthernet4/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet4/0, changed state to up
Router(config-if)#exit
Router(config)#
Router(config)#ip route 192.168.2.0 255.255.255.0 10.0.0.2
Router(config)#

```

Top

..



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

Static Routes

Network

192.168.1.0

Mask

255.255.255.0

Next Hop

10.0.0.1

Add

Network Address

192.168.1.0/24 via 10.0.0.1

Remove

Equivalent IOS Commands









```

Router(config)#interface FastEthernet0/0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface FastEthernet4/0
Router(config-if)#
Router(config-if)#exit
Router(config)#
Router(config)#ip route 192.168.1.0 255.255.255.0 10.0.0.1
Router(config)#

```

Top

...

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic
	Successful	PC1	PC2	IC...		0.000	N
	Successful	PC1	PC3	IC...		0.000	N
	Successful	PC0	PC2	IC...		0.000	N
	Successful	PC0	PC3	IC...		0.000	N