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Kelas : A

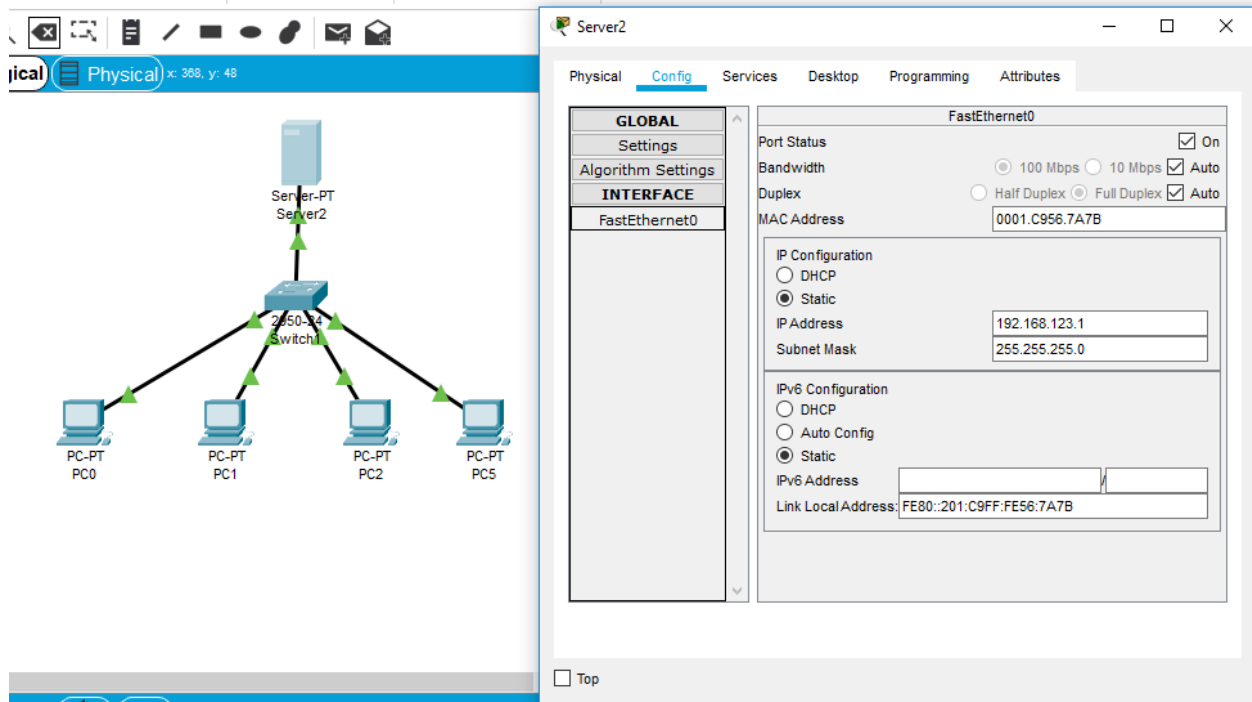
Matkul : Praktikum Jaringan Komputer

MODUL 5

DHCP SERVER DAN WEB SERVER

Praktikum 1 Membuat DHCP Server

a. Konfigurasi pada server



The image displays a network diagram on the left and a server configuration window on the right. The network diagram shows a central '250-24 Switch' connected to a 'Server-PT Server2' and four 'PC-PT' devices (PC0, PC1, PC2, PC5). The server configuration window, titled 'Server2', is open to the 'Config' tab. It shows the 'FastEthernet0' interface settings. The 'Port Status' is 'On'. The 'Bandwidth' is set to '100 Mbps' and 'Auto'. The 'Duplex' is set to 'Full Duplex' and 'Auto'. The 'MAC Address' is '0001.C956.7A7B'. The 'IP Configuration' is set to 'Static' with an 'IP Address' of '192.168.123.1' and a 'Subnet Mask' of '255.255.255.0'. The 'IPv6 Configuration' is set to 'Static' with an 'IPv6 Address' of 'FE80::201:C9FF:FE56:7A7B' and a 'Link Local Address' of 'FE80::201:C9FF:FE56:7A7B'.

Physical Config Services Desktop Programming Attributes

GLOBAL

Settings

Algorithm Settings

INTERFACE

FastEthernet0

FastEthernet0

Port Status ☒ On

Bandwidth ☒ 100 Mbps ☐ 10 Mbps ☒ Auto

Duplex ☐ Half Duplex ☒ Full Duplex ☒ Auto

MAC Address 0001.C956.7A7B

IP Configuration

☐ DHCP

☒ Static

IP Address 192.168.123.1

Subnet Mask 255.255.255.0

IPv6 Configuration

☐ DHCP

☐ Auto Config

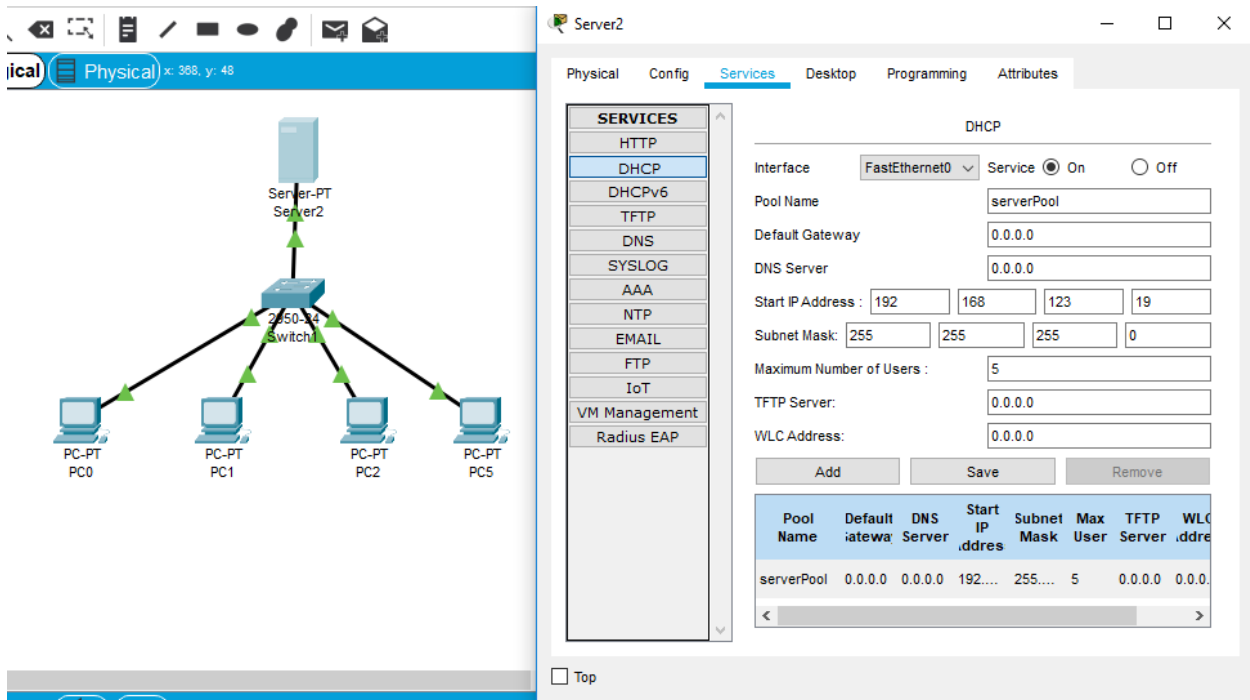
☒ Static

IPv6 Address FE80::201:C9FF:FE56:7A7B

Link Local Address FE80::201:C9FF:FE56:7A7B

Top

b. Konfigurasi dhcp pada server



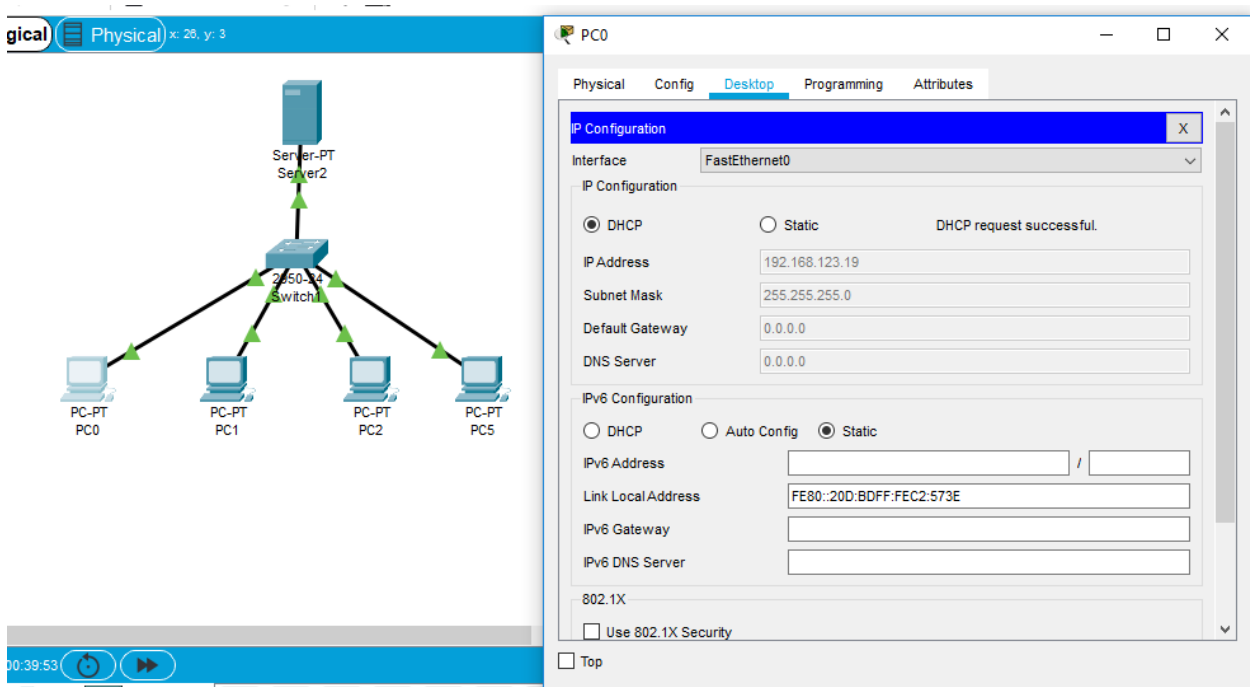
The image shows a network diagram on the left and a DHCP configuration window on the right. The network diagram illustrates a central 2550-24 switch connected to a Server-PT (Server2) and four PC-PT devices (PC0, PC1, PC2, PC5). The DHCP configuration window is titled 'Server2' and shows the 'Services' tab. The 'DHCP' service is selected and enabled. The configuration details are as follows:

Interface	Service
FastEthernet0	On

Pool Name: serverPool
Default Gateway: 0.0.0.0
DNS Server: 0.0.0.0
Start IP Address: 192.168.123.19
Subnet Mask: 255.255.255.0
Maximum Number of Users: 5
TFTP Server: 0.0.0.0
WLC Address: 0.0.0.0

Pool Name	Default Gateway	DNS Server	Start IP Address	Subnet Mask	Max User	TFTP Server	WLC Address
serverPool	0.0.0.0	0.0.0.0	192.168.123.19	255.255.255.0	5	0.0.0.0	0.0.0.0

c. Konfigurasi pada sisi client



The image shows a network diagram on the left and a PC0 configuration window on the right. The network diagram is identical to the one in section b. The PC0 configuration window is titled 'PC0' and shows the 'Desktop' tab. The 'IP Configuration' window is open, showing the 'FastEthernet0' interface. The configuration details are as follows:

Interface	IP Configuration
FastEthernet0	DHCP

IP Address: 192.168.123.19
Subnet Mask: 255.255.255.0
Default Gateway: 0.0.0.0
DNS Server: 0.0.0.0

IPv6 Configuration:

IPv6 Configuration
DHCP

IPv6 Address: /
Link Local Address: FE80::20D:BDFE:FEC2:573E
IPv6 Gateway:
IPv6 DNS Server:

Physical x: 74, y: 40

Server-PT Server2

2950-24 Switch

PC-PT PC0

PC-PT PC1

PC-PT PC2

PC-PT PC5

PC1

Physical Config Desktop Programming Attributes

IP Configuration X

Interface FastEthernet0

IP Configuration

☒ DHCP ☐ Static DHCP request successful.

IP Address 192.168.123.20

Subnet Mask 255.255.255.0

Default Gateway 0.0.0.0

DNS Server 0.0.0.0

IPv6 Configuration

☐ DHCP ☐ Auto Config ☒ Static

IPv6 Address /

Link Local Address FE80::206:2AFF:FED9:827

IPv6 Gateway

IPv6 DNS Server

802.1X

☐ Use 802.1X Security

Top

Physical x: 110, y: 22

Server-PT Server2

2950-24 Switch

PC-PT PC0

PC-PT PC1

PC-PT PC2

PC-PT PC5

PC2

Physical Config Desktop Programming Attributes

IP Configuration X

Interface FastEthernet0

IP Configuration

☒ DHCP ☐ Static DHCP request successful.

IP Address 192.168.123.21

Subnet Mask 255.255.255.0

Default Gateway 0.0.0.0

DNS Server 0.0.0.0

IPv6 Configuration

☐ DHCP ☐ Auto Config ☒ Static

IPv6 Address /

Link Local Address FE80::20C:CFFF:FE40:3ED6

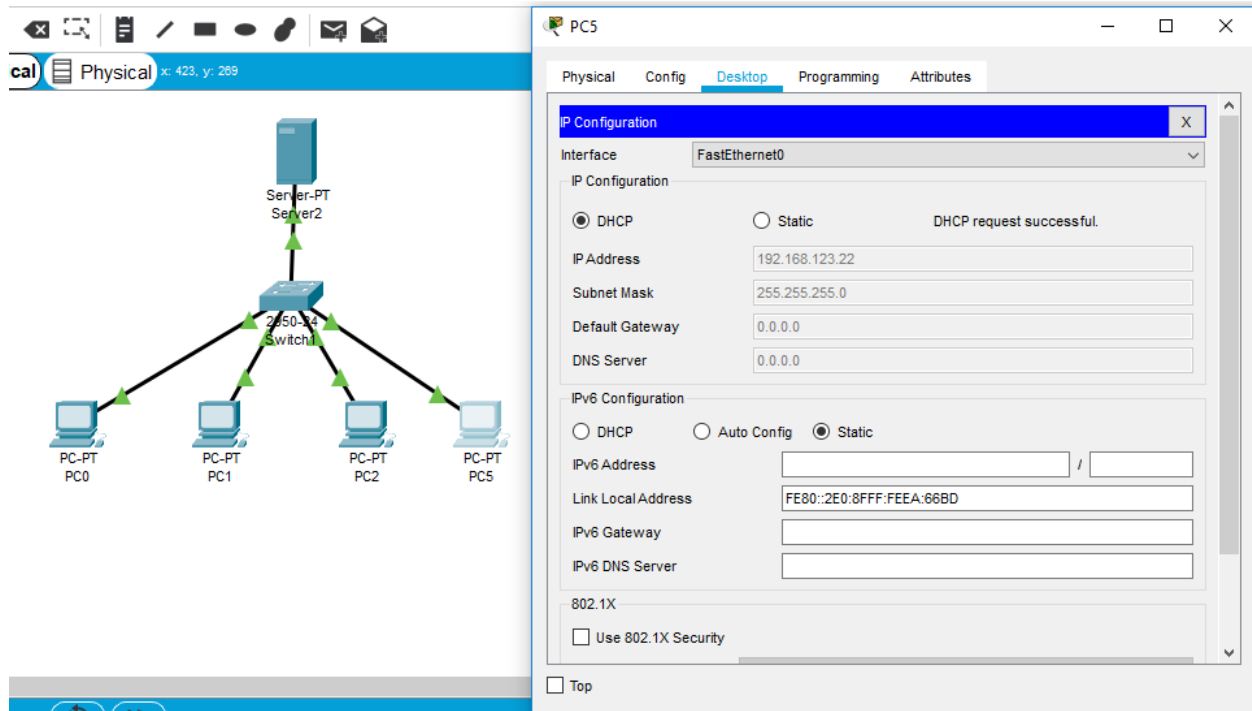
IPv6 Gateway

IPv6 DNS Server

802.1X

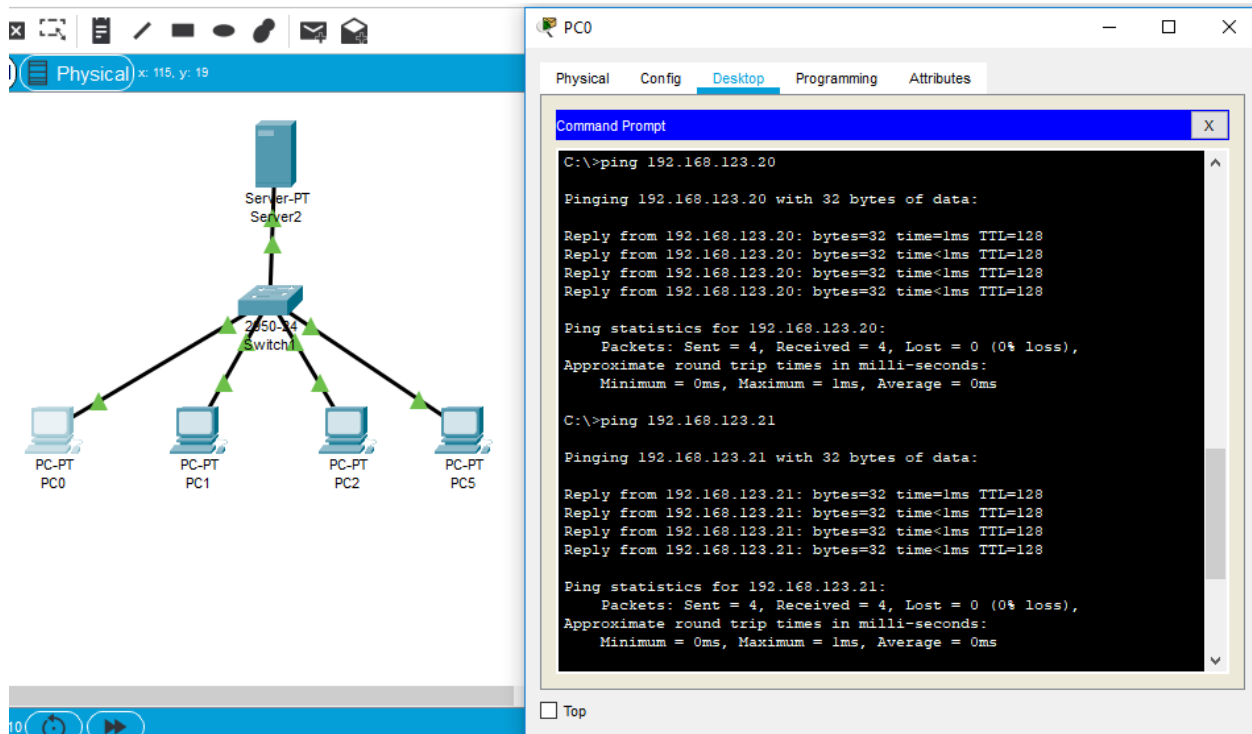
☐ Use 802.1X Security

Top

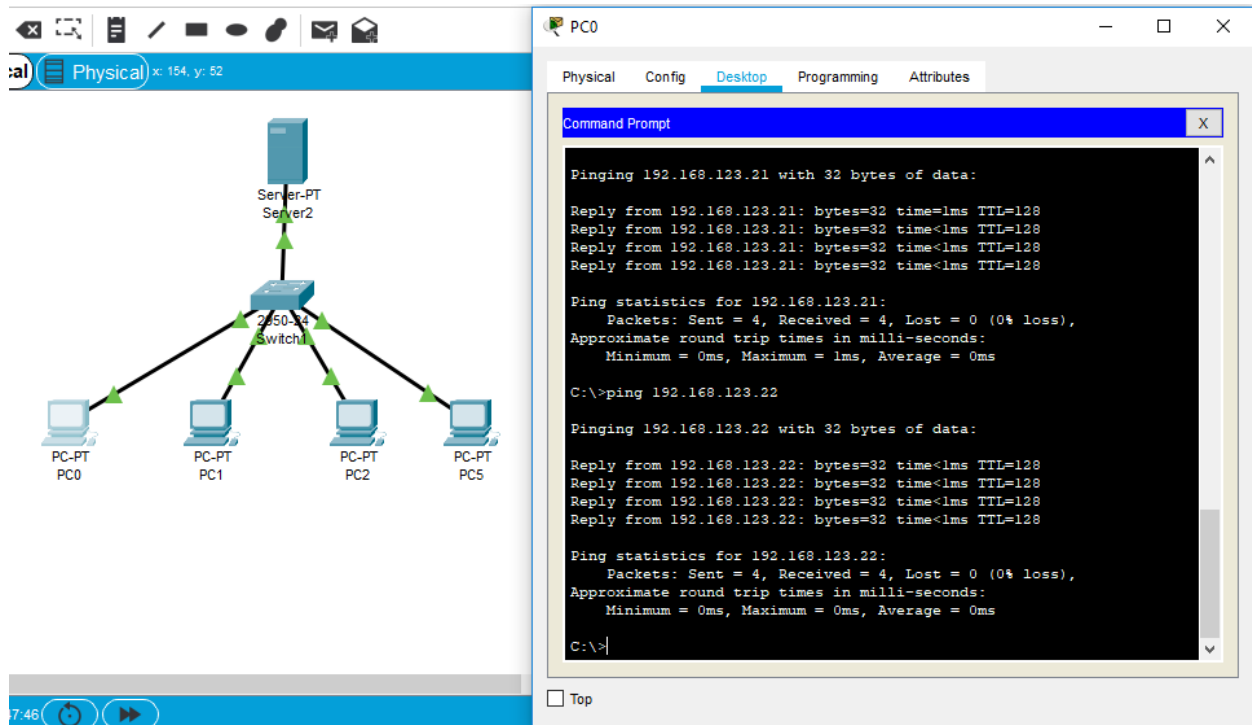


The image shows a network diagram on the left and a configuration window for PC5 on the right. The network diagram illustrates a topology where a central switch (2950-24) is connected to a server (Server-PT Server2) and four PCs (PC-PT PC0, PC-PT PC1, PC-PT PC2, and PC-PT PC5). The configuration window for PC5 is open to the 'Desktop' tab, showing the 'IP Configuration' section. The 'Interface' is set to 'FastEthernet0'. The 'IP Configuration' section has 'DHCP' selected, and a message indicates 'DHCP request successful.'. The 'IP Address' is 192.168.123.22, the 'Subnet Mask' is 255.255.255.0, the 'Default Gateway' is 0.0.0.0, and the 'DNS Server' is 0.0.0.0. The 'IPv6 Configuration' section has 'Static' selected, with an 'IPv6 Address' field, a 'Link Local Address' of FE80::2E0:8FFF:FE6A:66BD, and empty fields for 'IPv6 Gateway' and 'IPv6 DNS Server'. The '802.1X' section has 'Use 802.1X Security' unchecked. A 'Top' button is at the bottom left of the configuration window.

d. Melakukan ping ke semua



The image shows the same network diagram on the left and a command prompt window for PC0 on the right. The network diagram is identical to the one in the previous image. The command prompt window for PC0 is open to the 'Desktop' tab, showing the 'Command Prompt' window. The user has entered the command 'C:\>ping 192.168.123.20', and the output shows four successful replies from 192.168.123.20 with 32 bytes of data, each taking 1ms and having a TTL of 128. The ping statistics for 192.168.123.20 show 4 packets sent, 4 received, and 0 lost (0% loss), with a minimum round trip time of 0ms, a maximum of 1ms, and an average of 0ms. The user has then entered the command 'C:\>ping 192.168.123.21', and the output shows four successful replies from 192.168.123.21 with 32 bytes of data, each taking 1ms and having a TTL of 128. The ping statistics for 192.168.123.21 show 4 packets sent, 4 received, and 0 lost (0% loss), with a minimum round trip time of 0ms, a maximum of 1ms, and an average of 0ms. A 'Top' button is at the bottom left of the command prompt window.



The image shows a network diagram on the left and a PC0 configuration window on the right. The network diagram features a central 2450-24 Switch connected to a Server-PT Server2 above it and four PC-PT PCs (PC0, PC1, PC2, PC5) below it. The PC0 configuration window is open to the 'Desktop' tab, showing a Command Prompt with the following output:

```

C:\>ping 192.168.123.21

Pinging 192.168.123.21 with 32 bytes of data:

Reply from 192.168.123.21: bytes=32 time<1ms TTL=128
Reply from 192.168.123.21: bytes=32 time<1ms TTL=128
Reply from 192.168.123.21: bytes=32 time<1ms TTL=128
Reply from 192.168.123.21: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.123.21:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms

C:\>ping 192.168.123.22

Pinging 192.168.123.22 with 32 bytes of data:

Reply from 192.168.123.22: bytes=32 time<1ms TTL=128
Reply from 192.168.123.22: bytes=32 time<1ms TTL=128
Reply from 192.168.123.22: bytes=32 time<1ms TTL=128
Reply from 192.168.123.22: bytes=32 time<1ms TTL=128

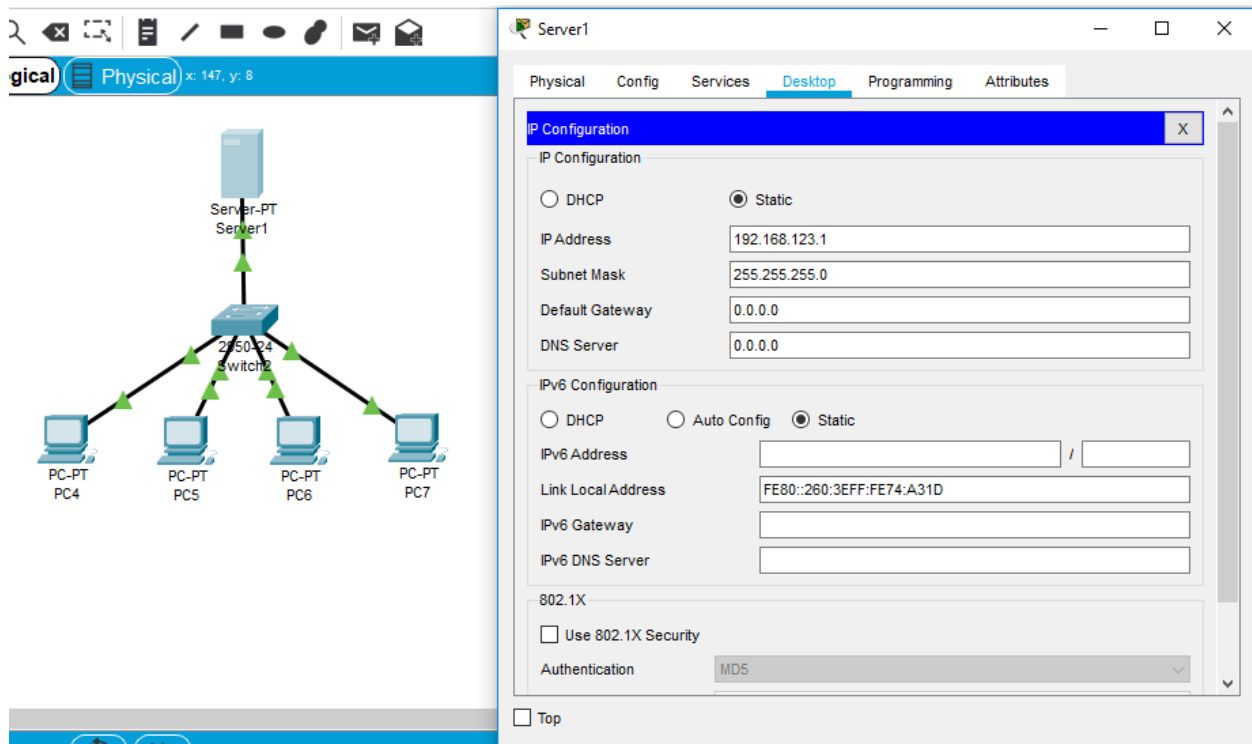
Ping statistics for 192.168.123.22:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>

```

Praktikum 2 Membuat Web Server

a. Konfigurasi pada server



The image shows a network diagram on the left and a Server1 configuration window on the right. The network diagram features a central 2450-24 Switch connected to a Server-PT Server1 above it and four PC-PT PCs (PC4, PC5, PC6, PC7) below it. The Server1 configuration window is open to the 'Desktop' tab, showing the 'IP Configuration' window with the following settings:

IP Configuration	
<input type="radio"/> DHCP	<input checked="" type="radio"/> Static
IP Address	192.168.123.1
Subnet Mask	255.255.255.0
Default Gateway	0.0.0.0
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::260:3EFF:FE74:A31D
IPv6 Gateway	
IPv6 DNS Server	
802.1X	
<input type="checkbox"/> Use 802.1X Security	
Authentication	MD5

b. Membuat halaman homepage

The screenshot displays the Cisco Packet Tracer interface. On the left, a network topology is shown with a 'Server-PT Server1' connected to a '2950-24 Switch'. The switch is connected to four PCs labeled 'PC-PT PC4', 'PC-PT PC5', 'PC-PT PC6', and 'PC-PT PC7'. On the right, the 'Server1' configuration window is open, with the 'Services' tab selected. The 'SERVICES' list on the left includes HTTP, DHCP, DHCPv6, TFTP, DNS, SYSLOG, AAA, NTP, EMAIL, FTP, IoT, VM Management, and Radius EAP. The 'File Name' field is set to 'index.html'. The main text area contains the following HTML code:

```
<html>
<center><font size="+2" color="blue">Cisco Packet Tracer</font></center>
<hr>Welcome to Paradise
<hr> ISMI DZIKRINA
<p>Quick Links:
<br><a href='helloworld.html'>A small page</a>
<br><a href='copyrights.html'>Copyrights</a>
<br><a href='image.html'>Image page</a>
<br><a href='cscoptlogo177x111.jpg'>Image</a>
</html>
```

At the bottom of the configuration window, there are 'File Manager' and 'Save' buttons. A 'Top' button is also visible at the very bottom of the interface.

C. konfigurasi pada client

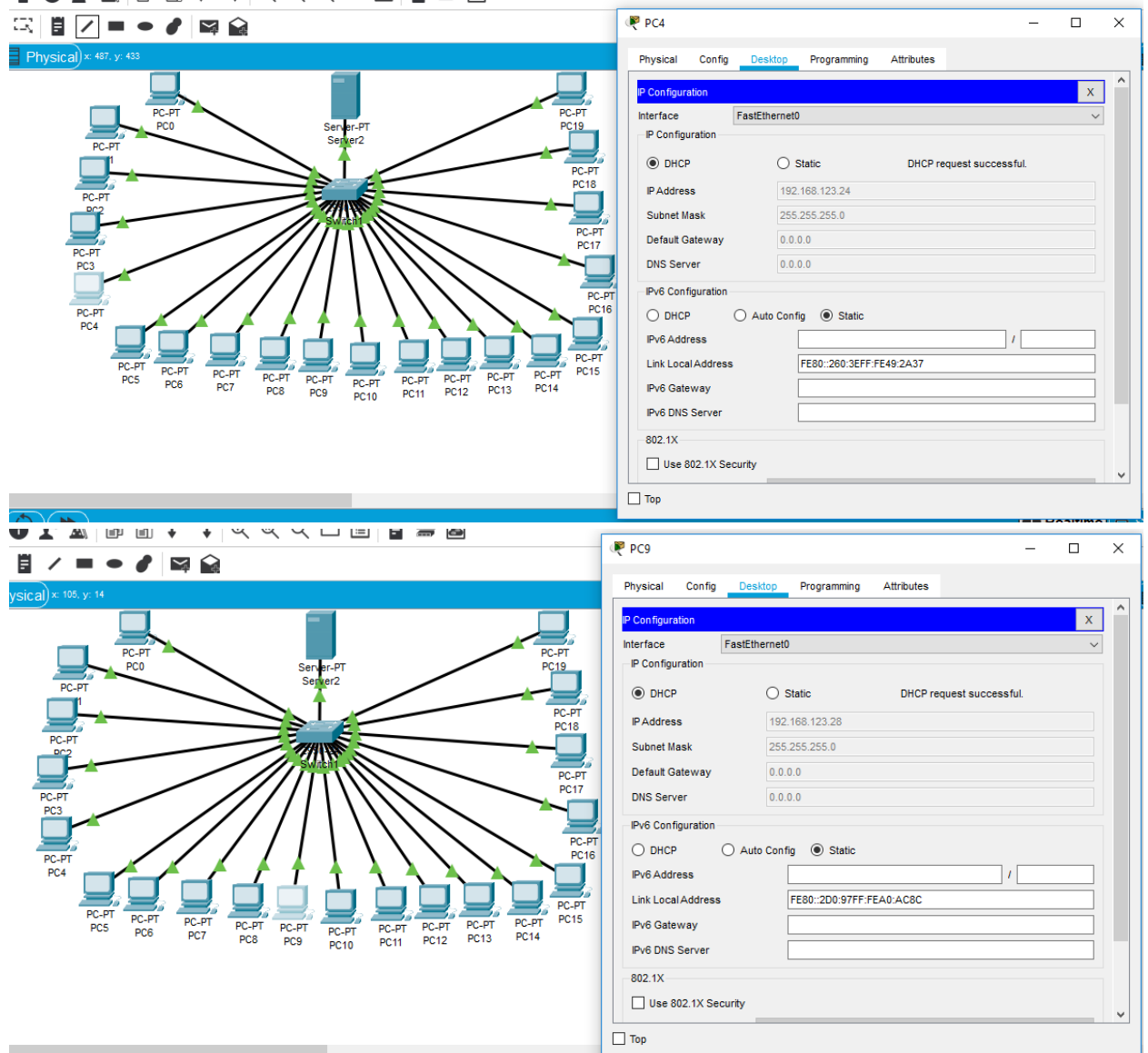
The screenshot displays the Cisco Packet Tracer interface. On the left, a network diagram shows a central switch connected to a server and four PCs (PC4, PC5, PC6, PC7). The right pane shows the configuration for PC4. The 'Config' tab is active, and the 'IP Configuration' window is open. The 'Interface' is set to 'FastEthernet0'. Under 'IP Configuration', 'Static' is selected. The 'IP Address' is 192.168.123.19, 'Subnet Mask' is 255.255.255.0, 'Default Gateway' is 192.168.123.1, and 'DNS Server' is 0.0.0.0. The 'IPv6 Configuration' section shows 'Static' selected with an 'IPv6 Address' field and a 'Link Local Address' of FE80::201:97FF:FEE8:3430. The '802.1X' section has 'Use 802.1X Security' unchecked. A 'Top' button is at the bottom left of the configuration pane.

c. Melakukan browsing

The screenshot shows the same network diagram as before. The right pane now displays the 'Web Browser' window for PC4. The 'URL' field contains 'http://192.168.123.1'. The browser shows the 'Cisco Packet Tracer' logo and a 'Welcome to Paradise' message. Below this, the name 'ISMI DZIKRINA' is displayed. A 'Quick Links' section contains four links: 'A small page', 'Copyrights', 'Image page', and 'Image'. A 'Top' button is located at the bottom left of the browser window.

TUGAS

1. Membuat DHCP server dengan client terdiri dari 20 pc (pengujian acak)



Physical x: 629, y: 447

PC19

Physical Config Desktop Programming Attributes

IP Configuration

Interface FastEthernet0

IP Configuration

☒ DHCP ☐ Static DHCP request successful.

IP Address 192.168.123.38

Subnet Mask 255.255.255.0

Default Gateway 0.0.0.0

DNS Server 0.0.0.0

IPv6 Configuration

☐ DHCP ☐ Auto Config ☒ Static

IPv6 Address

Link Local Address FE80::20C:85FF:FE2C:4AB9

IPv6 Gateway

IPv6 DNS Server

802.1X

☐ Use 802.1X Security

Top

Melakukan ping secara acak

Physical x: 380, y: 88

PC0

Physical Config Desktop Programming Attributes

Command Prompt

```
Packet Tracer PC Command Line 1.0
C:\>ping 192.168.123.20

Pinging 192.168.123.20 with 32 bytes of data:

Reply from 192.168.123.20: bytes=32 time=3ms TTL=128
Reply from 192.168.123.20: bytes=32 time=3ms TTL=128
Reply from 192.168.123.20: bytes=32 time=3ms TTL=128
Reply from 192.168.123.20: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.123.20:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 3ms, Average = 2ms

C:\>ping 192.168.123.35

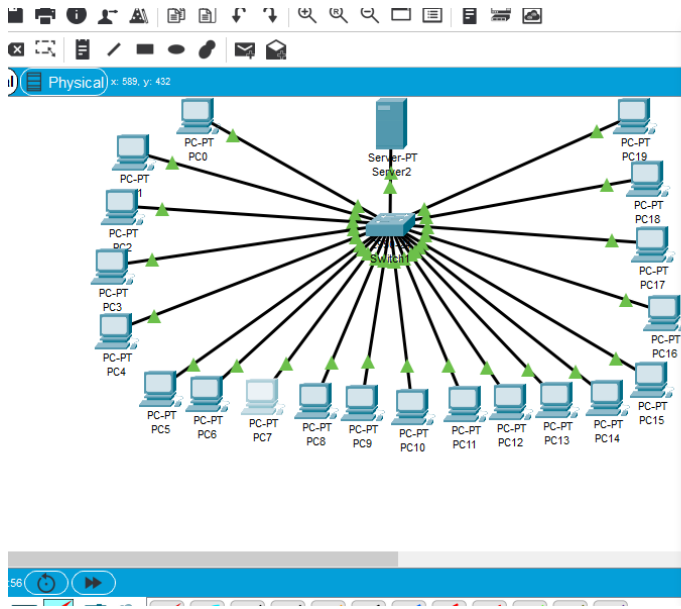
Pinging 192.168.123.35 with 32 bytes of data:

Reply from 192.168.123.35: bytes=32 time<1ms TTL=128
Reply from 192.168.123.35: bytes=32 time<1ms TTL=128
Reply from 192.168.123.35: bytes=32 time<1ms TTL=128
Reply from 192.168.123.35: bytes=32 time=1ms TTL=128

Ping statistics for 192.168.123.35:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms

C:\>
```

Top



```

PC7
Physical Config Desktop Programming Attributes
Command Prompt
C:\>ping 192.168.123.23

Pinging 192.168.123.23 with 32 bytes of data:

Reply from 192.168.123.23: bytes=32 time=1ms TTL=128
Reply from 192.168.123.23: bytes=32 time=3ms TTL=128
Reply from 192.168.123.23: bytes=32 time<1ms TTL=128
Reply from 192.168.123.23: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.123.23:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 3ms, Average = 1ms

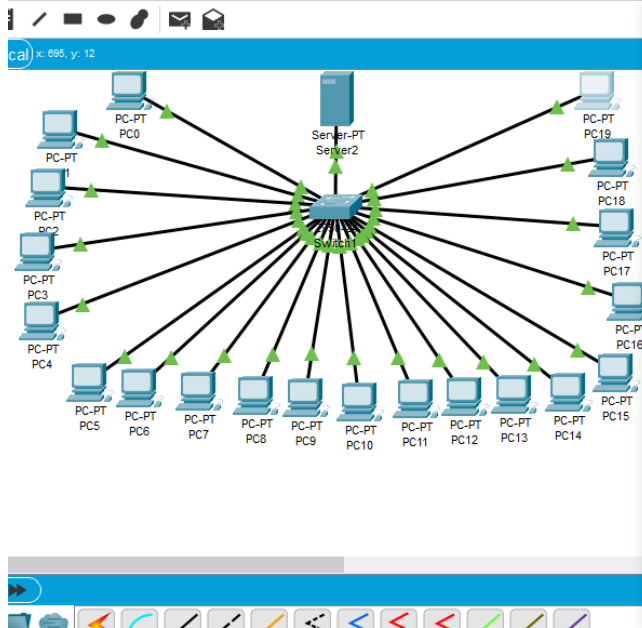
C:\>ping 192.168.123.38

Pinging 192.168.123.38 with 32 bytes of data:

Reply from 192.168.123.38: bytes=32 time=1ms TTL=128
Reply from 192.168.123.38: bytes=32 time<1ms TTL=128
Reply from 192.168.123.38: bytes=32 time<1ms TTL=128
Reply from 192.168.123.38: bytes=32 time=3ms TTL=128

Ping statistics for 192.168.123.38:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 3ms, Average = 1ms

C:\>
  
```



```

PC19
Physical Config Desktop Programming Attributes
Command Prompt
Packet Tracer PC Command Line 1.0
C:\>ping 192.168.123.32

Pinging 192.168.123.32 with 32 bytes of data:

Reply from 192.168.123.32: bytes=32 time=1ms TTL=128
Reply from 192.168.123.32: bytes=32 time<1ms TTL=128
Reply from 192.168.123.32: bytes=32 time<1ms TTL=128
Reply from 192.168.123.32: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.123.32:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms

C:\>ping 192.168.123.19

Pinging 192.168.123.19 with 32 bytes of data:

Reply from 192.168.123.19: bytes=32 time=1ms TTL=128
Reply from 192.168.123.19: bytes=32 time<1ms TTL=128
Reply from 192.168.123.19: bytes=32 time<1ms TTL=128
Reply from 192.168.123.19: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.123.19:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms

C:\>
  
```

2. Mengubah isi web browser dengan nama, nim, alamat, jurusan, jenis, jenis kelamin

The image displays two screenshots from the Cisco Packet Tracer application. The top screenshot shows a network topology with a central switch (Switch2) connected to four PCs (PC4, PC5, PC6, PC7) and a server (Server1). The bottom screenshot shows the configuration of a web browser on PC4, displaying the HTML content of the index.html file.

Network Topology:

- Server-PT Server1
- Switch2 (2550-24)
- PC-PT PC4
- PC-PT PC5
- PC-PT PC6
- PC-PT PC7

Web Browser Configuration (PC4):

Physical Config **Desktop** Programming Attributes

Web Browser

URL: <http://192.168.123.1> Go Stop

Cisco Packet Tracer

Welcome to my Paradise

Nama : ISMI DZIKRINA
NIM : L200180010
Alamat : Sukoharjo
Jurusan : Informatika
Jenis : Reguler
Jenis Kelamin : Perempuan

Quick Links:
[A small page](#)
[Copyrights](#)
[Image page](#)
[Image](#)