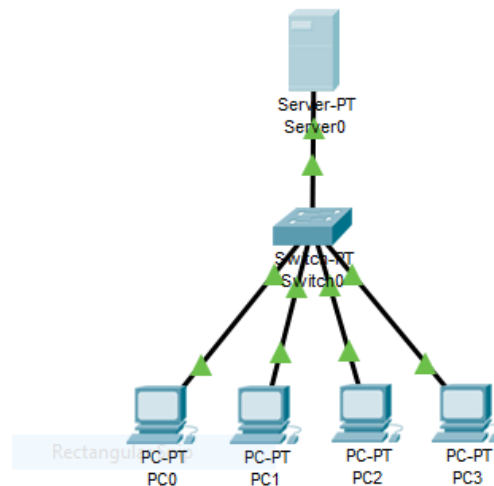


Nama : Berlian Vidia Puspa
NIM : L200180107
Kelas : C

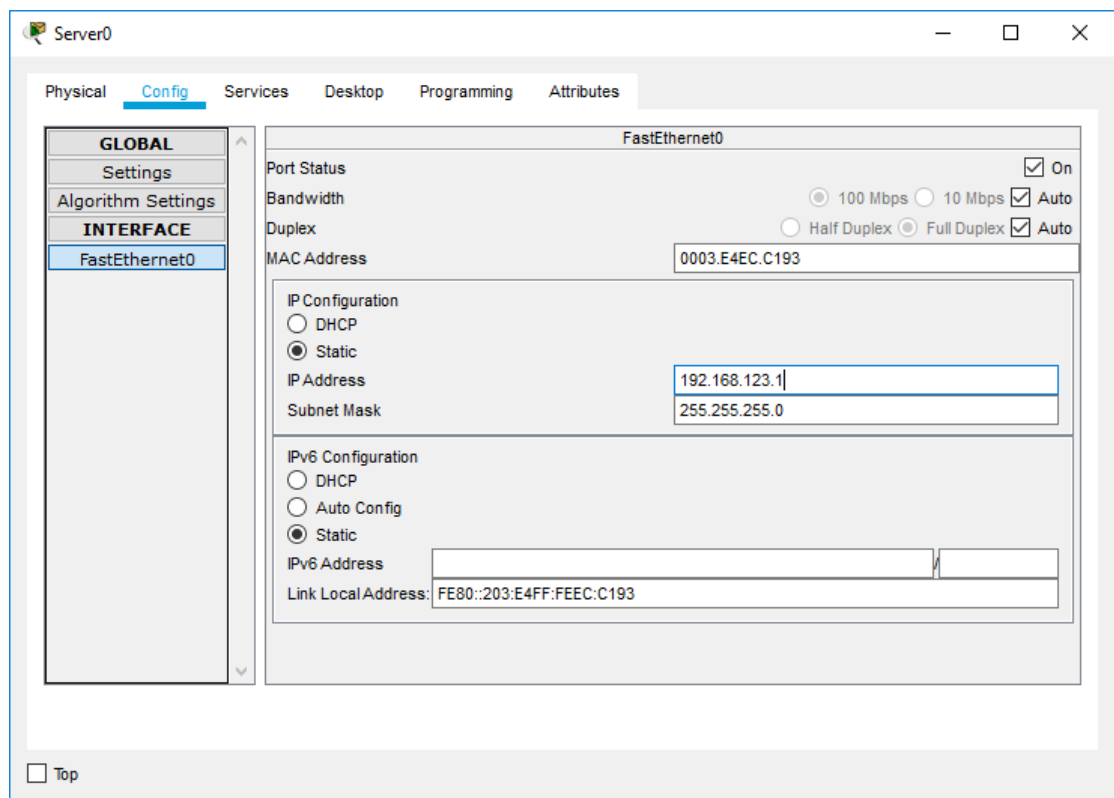
Modul BAB V (DHCP Server)

1. Kegiatan-1 (Membuat DHCP Server)

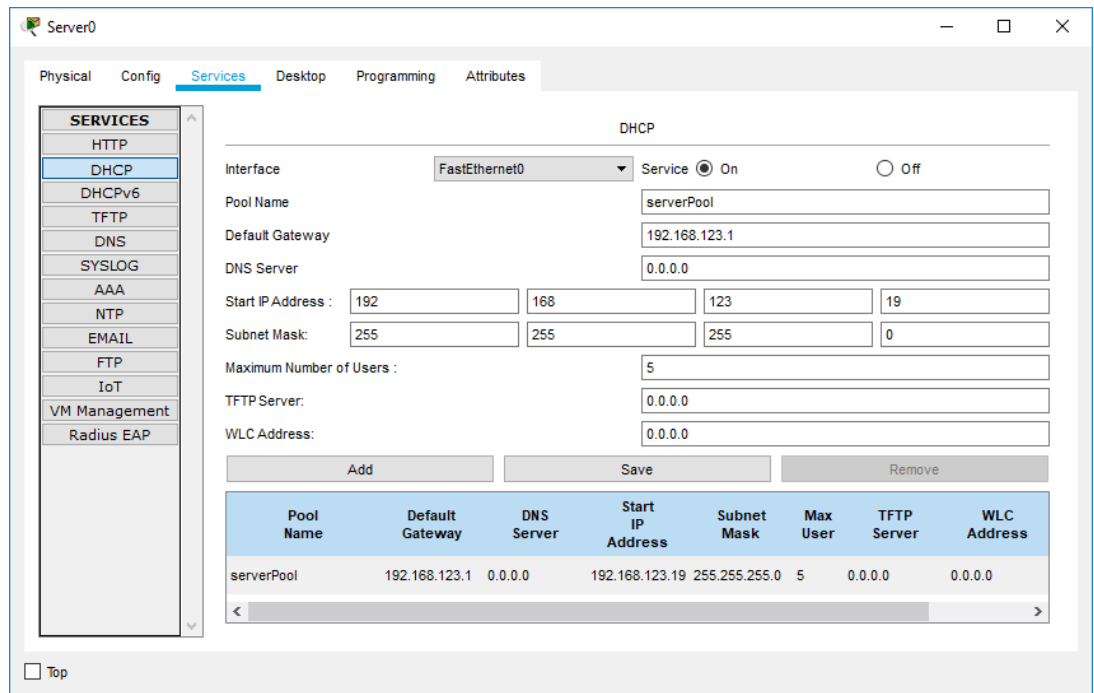
1. Persiapan simulasi server DHCP dalam contoh ini adalah dengan menggunakan 5 buah workstation, 1 Switch dan 1 Server.



- a. Double-klik Server0 , pilih tab Config. Pada menu interface, pilih Fast-Ethernet . Pada bagian IP Configuration , isikan dengan IP address server, dalam contoh ini 192.168.123.1 subnet mask 255.255.255.0

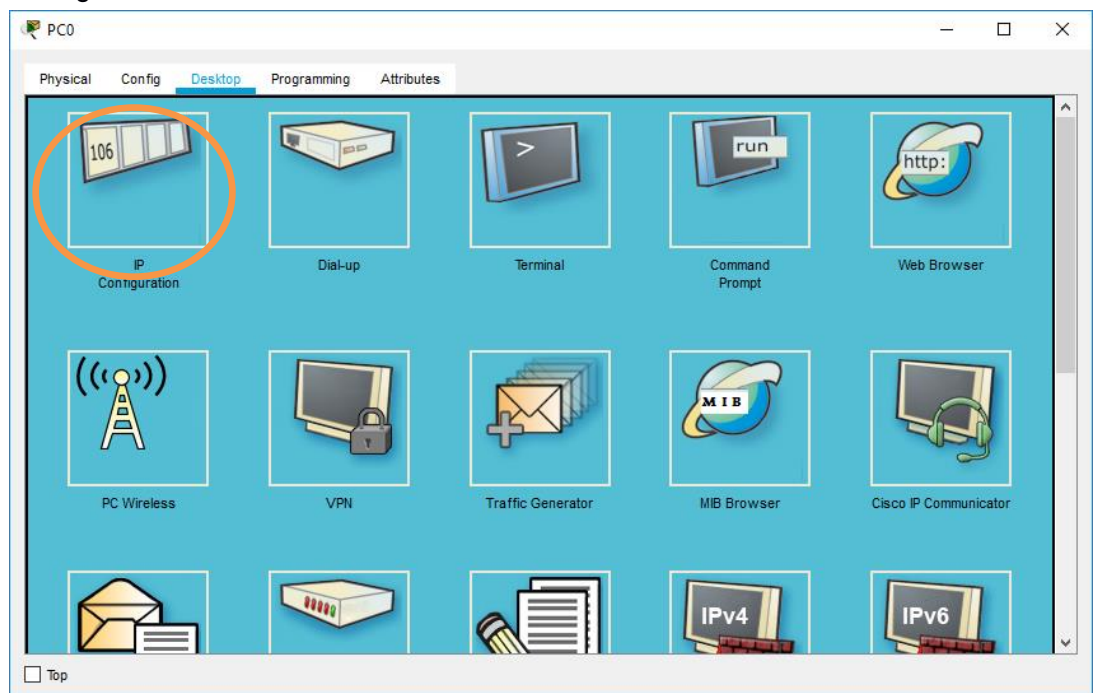


- b. Untuk konfigurasi dhcp server pada jendela properties server 0 pada services, pilih DHCP. Pastikan service DHCP On. Isikan blok IP address yang akan diberikan ke PC client.



Pada start ip address isikan dengan 192.168.123.19, dan pada maximum number of users=5 . Hal ini berarti setiap host yang request IP pada DHCP server akan mendapatkan IP address mulai dari range 192.168.123.19-192.168.123.23. untuk field default gateway dan dns server biarkan kosong untuk contoh ini.

- c. **Pada sisi client** konfigurasi dilakukan dengan cara sebagai berikut. Double klik pada PC. Pilih tab desktop , pada menu yang ada, pilih menu IP Configuration.



- d. Pastikan pilihan radio button pada pilihan DHCP. Setelah konfigurasi selesai, silahkan cek IP pada pc tersebut.

The screenshot shows the 'PC0' configuration window with the 'Desktop' tab selected. The 'DHCP' radio button is selected, and a message 'DHCP request successful.' is displayed. The IP configuration fields are filled with the following values:

Field	Value
IP Address	192.168.123.19
Subnet Mask	255.255.255.0
Default Gateway	192.168.123.1
DNS Server	0.0.0.0

The 'IPv6 Configuration' section shows the 'Static' radio button selected. The fields are as follows:

Field	Value
IPv6 Address	
Link Local Address	FE80::203:E4FF:FE8C:1E5B
IPv6 Gateway	
IPv6 DNS Server	

The '802.1X' section has 'Use 802.1X Security' unchecked, and the 'Authentication' dropdown is set to 'MD5'. The 'Username' and 'Password' fields are empty.

This screenshot is identical to the one above, showing the 'PC0' configuration window with the 'Desktop' tab selected. The 'DHCP' radio button is selected, and a message 'DHCP request successful.' is displayed. The IP configuration fields are filled with the following values:

Field	Value
IP Address	192.168.123.19
Subnet Mask	255.255.255.0
Default Gateway	192.168.123.1
DNS Server	0.0.0.0

The 'IPv6 Configuration' section shows the 'Static' radio button selected. The fields are as follows:

Field	Value
IPv6 Address	
Link Local Address	FE80::203:E4FF:FE8C:1E5B
IPv6 Gateway	
IPv6 DNS Server	

The '802.1X' section has 'Use 802.1X Security' unchecked, and the 'Authentication' dropdown is set to 'MD5'. The 'Username' and 'Password' fields are empty.

PC2

Physical Config **Desktop** Programming Attributes

☒ DHCP ☐ Static DHCP request successful.

IP Address 192.168.123.21

Subnet Mask 255.255.255.0

Default Gateway 192.168.123.1

DNS Server 0.0.0.0

IPv6 Configuration

☐ DHCP ☐ Auto Config ☒ Static

IPv6 Address /

Link Local Address FE80::204:9AFF:FE26:EC1B

IPv6 Gateway

IPv6 DNS Server

802.1X

☐ Use 802.1X Security

Authentication MD5

Username

Password

☐ Top

PC2

Physical Config **Desktop** Programming Attributes

☒ DHCP ☐ Static DHCP request successful.

IP Address 192.168.123.21

Subnet Mask 255.255.255.0

Default Gateway 192.168.123.1

DNS Server 0.0.0.0

IPv6 Configuration

☐ DHCP ☐ Auto Config ☒ Static

IPv6 Address /

Link Local Address FE80::204:9AFF:FE26:EC1B

IPv6 Gateway

IPv6 DNS Server

802.1X

☐ Use 802.1X Security

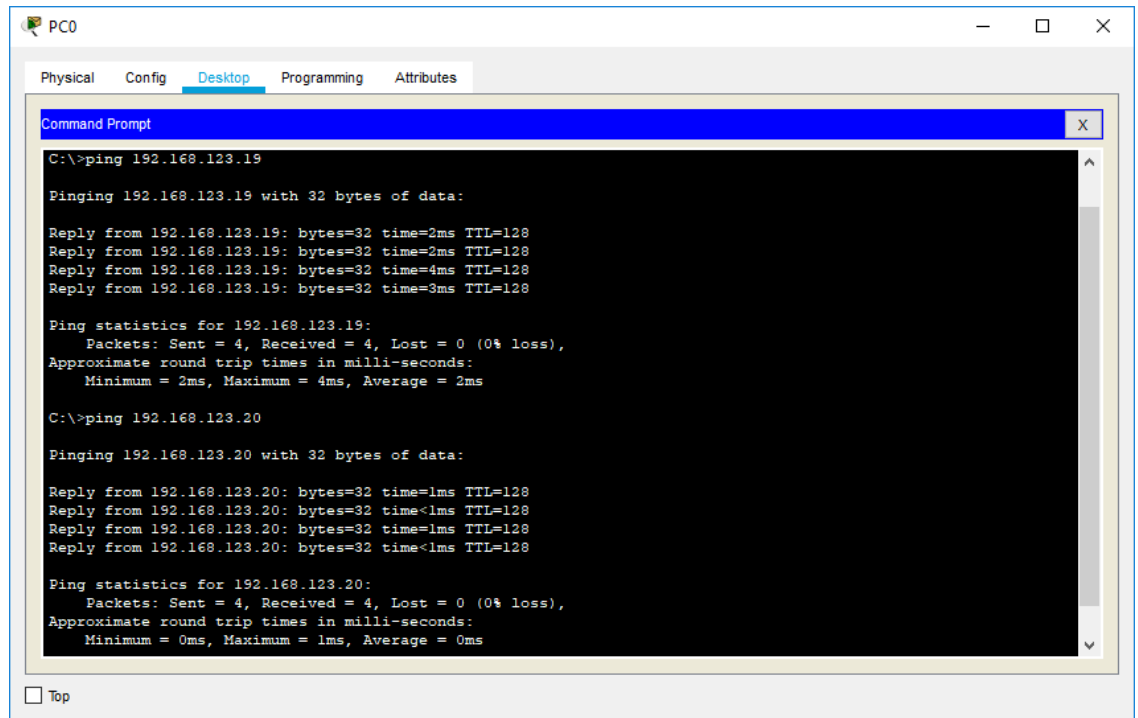
Authentication MD5

Username

Password

☐ Top

- e. Setelah selesai konfigurasi semua, ping ke semua pc yang terhubung dengan server DHCP . Tunjukkan hasilnya ke asisten untuk dinilai.



The screenshot shows a window titled "PC0" with tabs for Physical, Config, Desktop, Programming, and Attributes. The "Desktop" tab is active, displaying a Command Prompt window. The Command Prompt shows the execution of two ping commands. The first command is "C:\>ping 192.168.123.19", which results in four successful replies from 192.168.123.19 with varying times (2ms, 2ms, 4ms, 3ms) and a TTL of 128. The statistics show 4 packets sent, 4 received, 0 lost, with a minimum round trip time of 2ms, maximum of 4ms, and average of 2ms. The second command is "C:\>ping 192.168.123.20", which results in four successful replies from 192.168.123.20 with times less than 1ms and a TTL of 128. The statistics show 4 packets sent, 4 received, 0 lost, with a minimum round trip time of 0ms, maximum of 1ms, and average of 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=2ms TTL=128
Reply from 192.168.123.19: bytes=32 time=2ms TTL=128
Reply from 192.168.123.19: bytes=32 time=4ms TTL=128
Reply from 192.168.123.19: bytes=32 time=3ms TTL=128

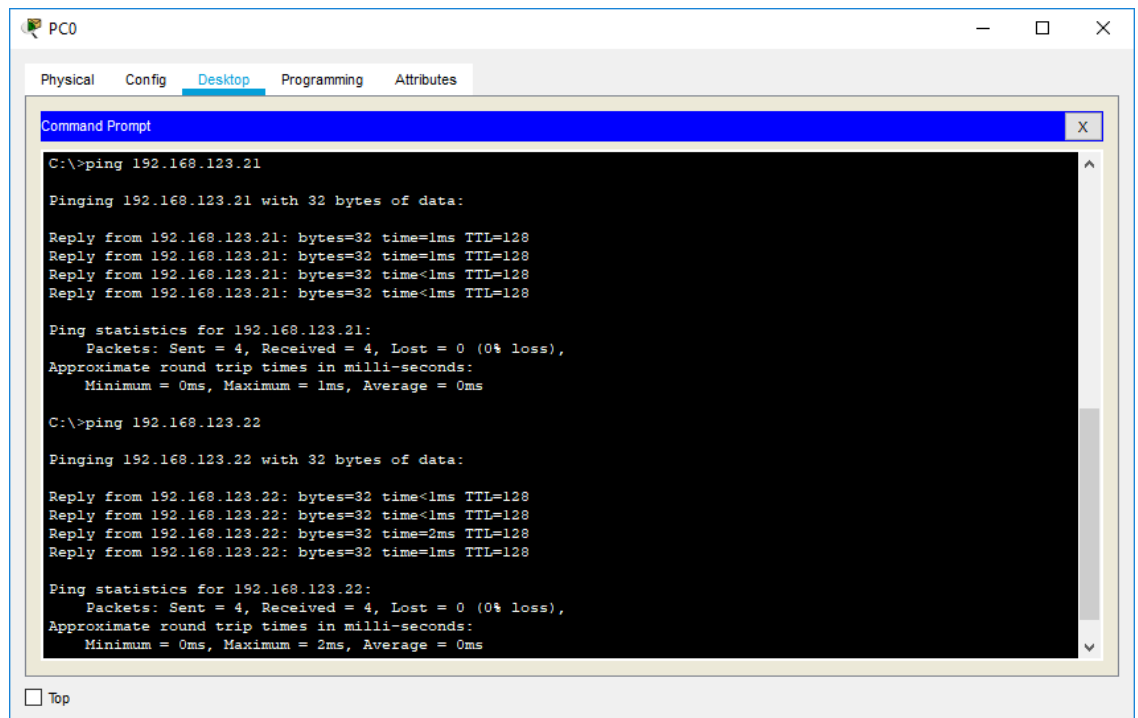
Ping statistics for 192.168.123.19:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 2ms, Maximum = 4ms, Average = 2ms

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<1ms TTL=128
Reply from 192.168.123.20: bytes=32 time<1ms TTL=128
Reply from 192.168.123.20: bytes=32 time<1ms 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 = 1ms, Average = 0ms
```



The screenshot shows a window titled "PC0" with tabs for Physical, Config, Desktop, Programming, and Attributes. The "Desktop" tab is active, displaying a Command Prompt window. The Command Prompt shows the execution of two ping commands. The first command is "C:\>ping 192.168.123.21", which results in four successful replies from 192.168.123.21 with times less than 1ms and a TTL of 128. The statistics show 4 packets sent, 4 received, 0 lost, with a minimum round trip time of 0ms, maximum of 1ms, and average of 0ms. The second command is "C:\>ping 192.168.123.22", which results in four successful replies from 192.168.123.22 with times less than 1ms, 1ms, 2ms, and 1ms, and a TTL of 128. The statistics show 4 packets sent, 4 received, 0 lost, with a minimum round trip time of 0ms, maximum of 2ms, and average of 0ms.

```
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

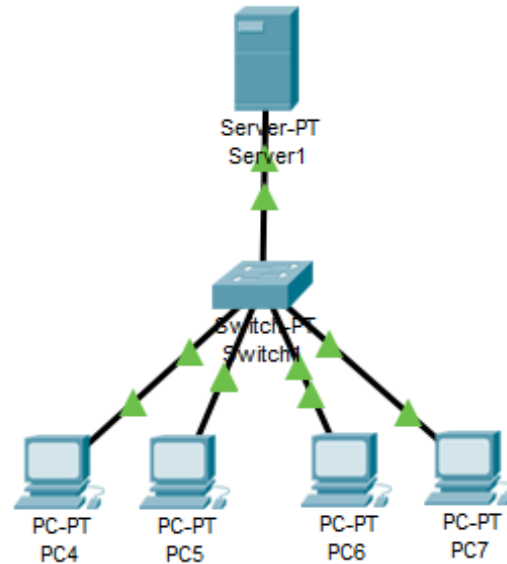
Pinging 192.168.123.22 with 32 bytes of data:

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=2ms TTL=128
Reply from 192.168.123.22: bytes=32 time=1ms TTL=128

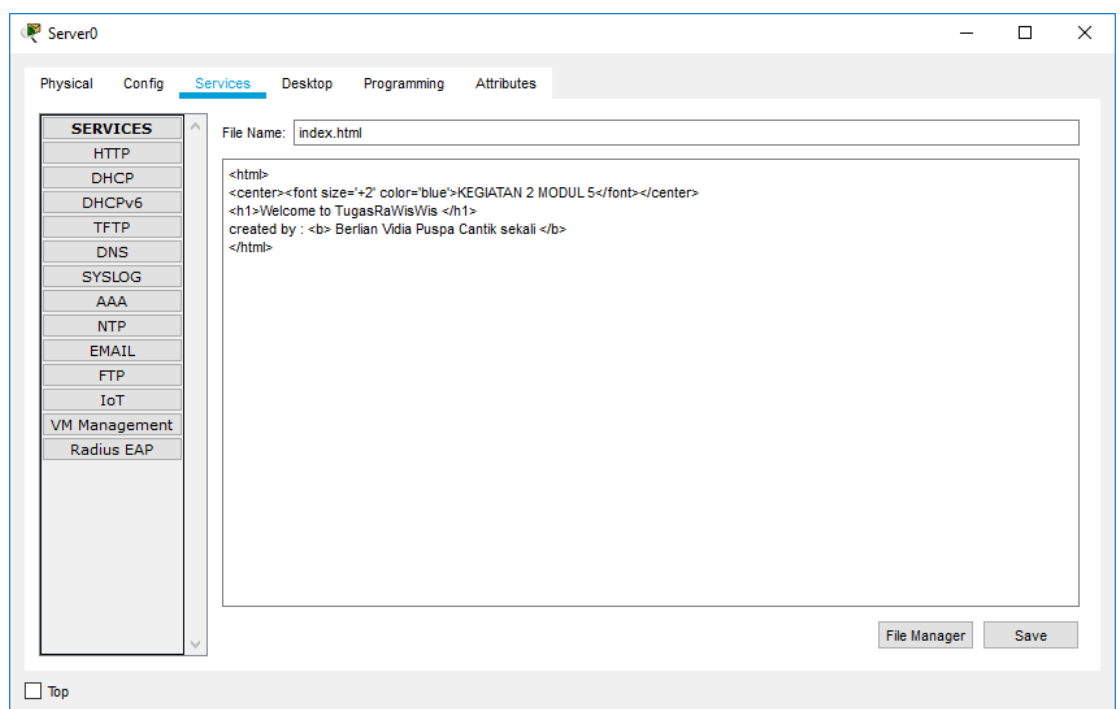
Ping statistics for 192.168.123.22:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 2ms, Average = 0ms
```

2. Kegiatan-1 (Membuat Web Server)

Persiapan simulasi server HTTP dalam contoh ini adalah dengan menggunakan 1 buah workstation dan 1 server yang terhubung langsung dengan kabel --tipe cross-- sehingga terlihat seperti gambar 11 di bawah ini.

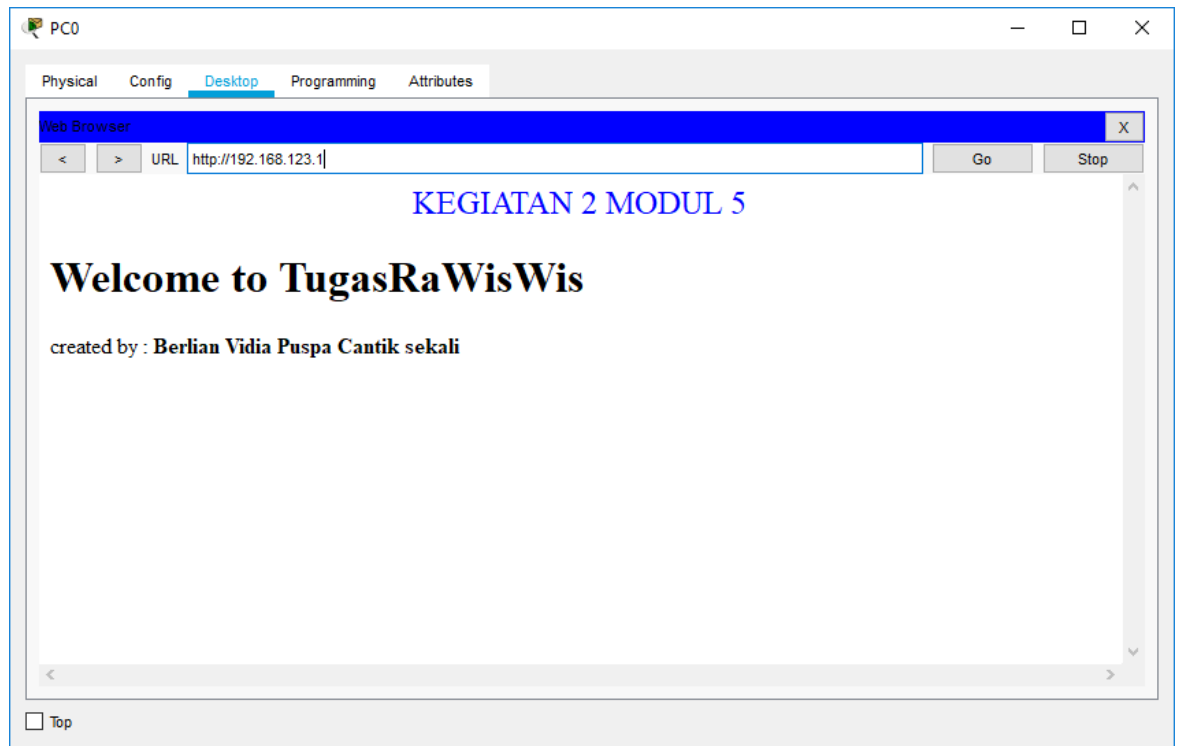


- Lakukan konfigurasi IP address pada PC0 seperti yang telah dijelaskan di bagian sebelumnya.
- Lakukan konfigurasi IP address pada Server0. Langkah-langkah mengkonfigurasi IP address. Untuk tipe Server-PT pada Cisco Packet Tracer sama dengan workstationnya. (PC-PT)
- Double-klik Server0 sehingga jendela properti Server0 muncul . Pindahkan ke tab Config. Pada menu kiri bagian Services, pilih HTTP. Pastikan radio button serverce HHTTP pada pilihan On. Anda juga bisa mengubah halaman homepage Server0, dengan cara mengubah script HTML yang ada sesuka anda. Ilustrasi konfigurasi bis dilihat di gambar dibawah ini.



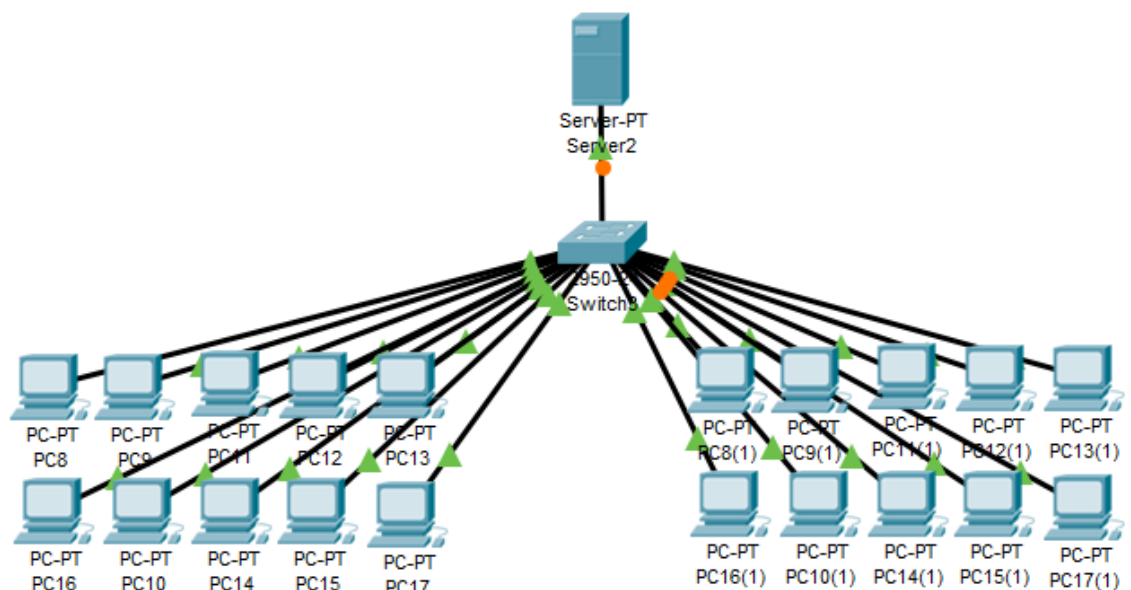
d. Melakukan Browsing HTTP

Double-klik PC0 sehingga muncul jendela properties PC0. Pilih tab Desktop. Pada daftar menu, pilih Web Browser. Ketika jendela web browser muncul, ketikkan IP address Server0(1)/Server HTTP(192.168.123.2) di field URL. Sesaat setelah itu akan dihasilkan tampilan halaman web pada Server0 di web browser PC0(1). Gambar 13 memperlihatkan hasil akhirnya.



E. Tugas

1. Buatlah dhcp server dengan packet tracer dengan client terdiri dari 20 pc !
 2. Buatlah web server pada packet tracer. Dengan mengubah tampilan pada web tersebut. Dengan isi :
 - a. Nama
 - b. Nim
 - c. Alamat
 - d. Jurusan
 - e. Jenis Kelamin
1. Berarti membutuhkan 1 server , 1 switch 2960 dan 20 pc client. Tampilan seperti dibawah ini.



Lalu, setting IP address pada server.

The screenshot shows the configuration window for 'Server2'. The 'Desktop' tab is selected. Under the 'DHCP' section, the 'Static' radio button is chosen. The IP Address is set to 192.168.123.1, Subnet Mask to 255.255.255.0, Default Gateway to 192.168.123.1, and DNS Server to 0.0.0.0. The 'IPv6 Configuration' section shows 'Static' selected, with IPv6 Address, Link Local Address (FE80::200:CFF:FE33:A586), IPv6 Gateway, and IPv6 DNS Server fields. The '802.1X' section has 'Use 802.1X Security' unchecked, with 'Authentication' set to 'MD5' and empty fields for 'Username' and 'Password'. A 'Top' button is at the bottom left.

Setting juga DHCP server di servernya.

Server2

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: 192.168.123.1

DNS Server: 0.0.0.0

Start IP Address: 192 168 123 19

Subnet Mask: 255 255 255 0

Maximum Number of Users: 20

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	192.168.123.1	0.0.0.0	192.168.123.19	255.255.255.0	20	0.0.0.0	0.0.0.0

Top

Activate Windows
Go to Settings to activate Windows.

test ke clien PC.

PC8

Physical Config **Desktop** Programming Attributes

☒ DHCP ☐ Static DHCP request successful.

IP Address: 192.168.123.19

Subnet Mask: 255.255.255.0

Default Gateway: 192.168.123.1

DNS Server: 0.0.0.0

IPv6 Configuration

☐ DHCP ☐ Auto Config ☒ Static

IPv6 Address: /

Link Local Address: FE80::203:E4FF:FE9A:91A0

IPv6 Gateway:

IPv6 DNS Server:

802.1X

☐ Use 802.1X Security

Authentication: MD5

Username:

Password:

Top

PC9

Physical Config **Desktop** Programming Attributes

☒ DHCP ☐ Static DHCP request successful.

IP Address 192.168.123.20

Subnet Mask 255.255.255.0

Default Gateway 192.168.123.1

DNS Server 0.0.0.0

IPv6 Configuration

☐ DHCP ☐ Auto Config ☒ Static

IPv6 Address /

Link Local Address FE80::210:11FF:FEC3:7BC8

IPv6 Gateway

IPv6 DNS Server

802.1X

☐ Use 802.1X Security

Authentication MD5

Username

Password

☐ Top

PC11

Physical Config **Desktop** Programming Attributes

☒ DHCP ☐ Static DHCP request successful.

IP Address 192.168.123.21

Subnet Mask 255.255.255.0

Default Gateway 192.168.123.1

DNS Server 0.0.0.0

IPv6 Configuration

☐ DHCP ☐ Auto Config ☒ Static

IPv6 Address /

Link Local Address FE80::2D0:FFFF:FE8E:145

IPv6 Gateway

IPv6 DNS Server

802.1X

☐ Use 802.1X Security

Authentication MD5

Username

Password

☐ Top

PC12

Physical Config **Desktop** Programming Attributes

☒ DHCP ☐ Static DHCP request successful.

IP Address 192.168.123.22

Subnet Mask 255.255.255.0

Default Gateway 192.168.123.1

DNS Server 0.0.0.0

IPv6 Configuration

☐ DHCP ☐ Auto Config ☒ Static

IPv6 Address /

Link Local Address FE80::2E0:F7FF:FEA2:C01

IPv6 Gateway

IPv6 DNS Server

802.1X

☐ Use 802.1X Security

Authentication MD5







Username

Password

☐ Top

DII...

Melakukan ping

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit
	Successful	PC8	PC9	ICMP		0.000	N	0	(edit)
	Successful	PC8	PC8(1)	ICMP		0.000	N	1	(edit)
	Successful	PC8	Server2	ICMP		0.000	N	2	(edit)

2. Buatlah web server dengan ketentuan yang telah ditentukan.
 - a. ini edit dulu di file html pada server

Server2

PhysicalConfigServicesDesktopProgrammingAttributes

SERVICES

HTTP

DHCP

DHCPv6

TFTP

DNS

SYSLOG

AAA

NTP

EMAIL

FTP

IoT

VM Management

Radius EAP

File Name: index.html

```
<html>
<center><font size="+2" color="blue">TUGAS MODUL 5</font></center>
<hr color = "red">Welcome to TugasWisPokokeJos
<h1>IDENTITAS</h1>
<br>Nama      : Berlian Vidia Puspa</a>
<br>NIM       : L200180107</a>
<br>Alamat    : Pati KOTA</a>
<br>Jurusan   : Informatika</a>
<br>Jenis Kelamin : Dipertanyakan</a>
</html>
```

File ManagerSave

☐ Top

b. Lalu test di client kita

