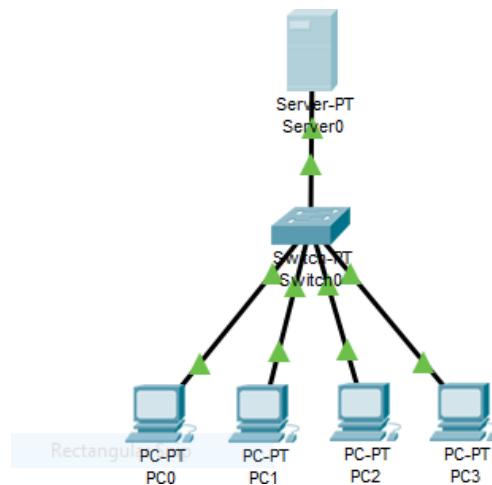


Nama : Farid Aziz Priyo F
NIM : L200180117
Kelas : C

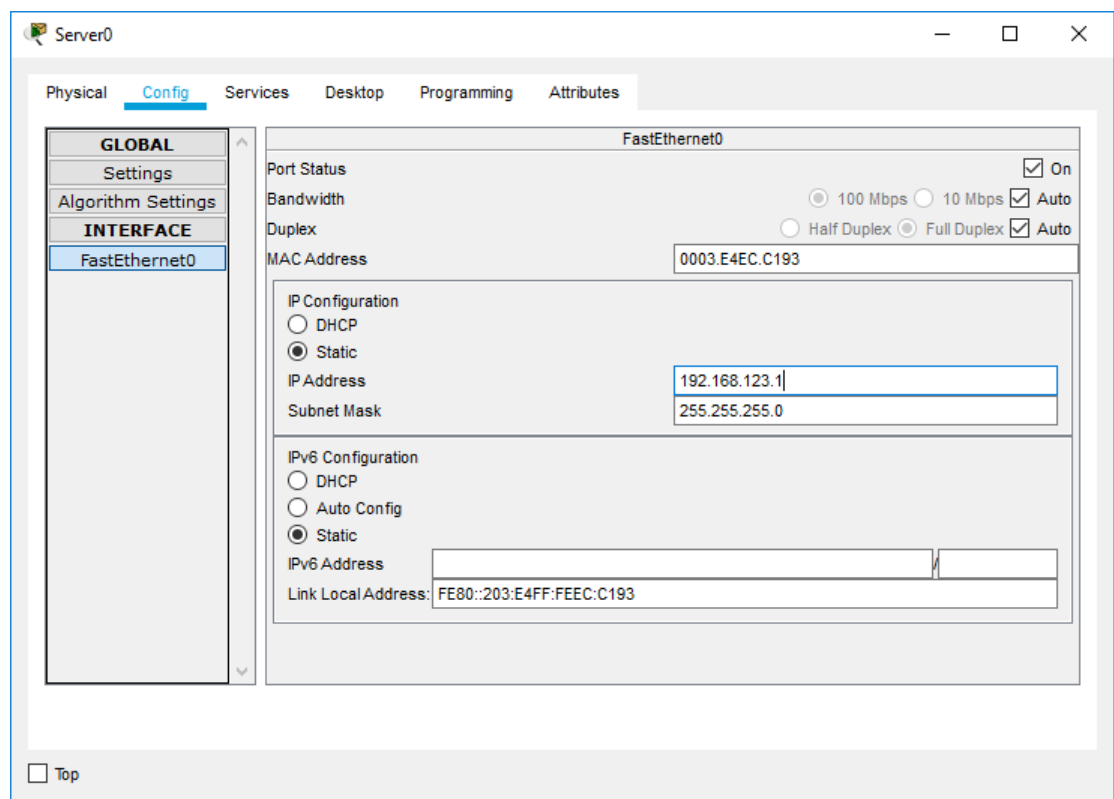
Modul BAB V (DHCP Server)

1. Kegiatan-1 (Membuat DHCP Server)

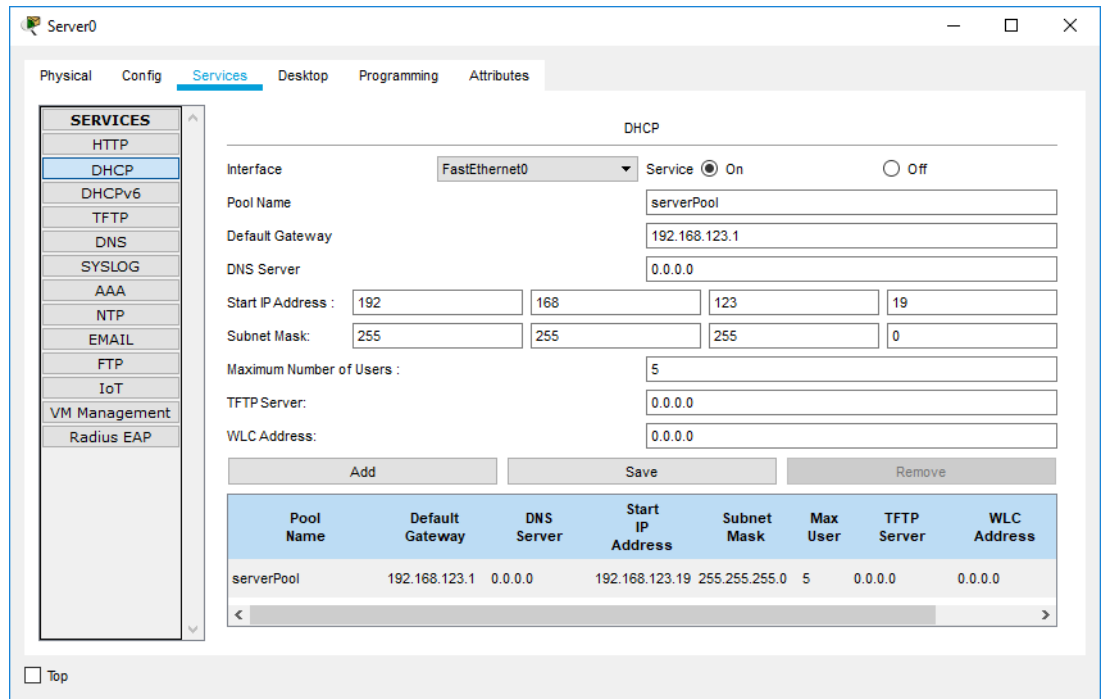
1. Persiapan simulasi server DHCP dalam contoh ini adalah dengan menggunakan 5 buah workstation, 1 Switch dan 1 Server.



- 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

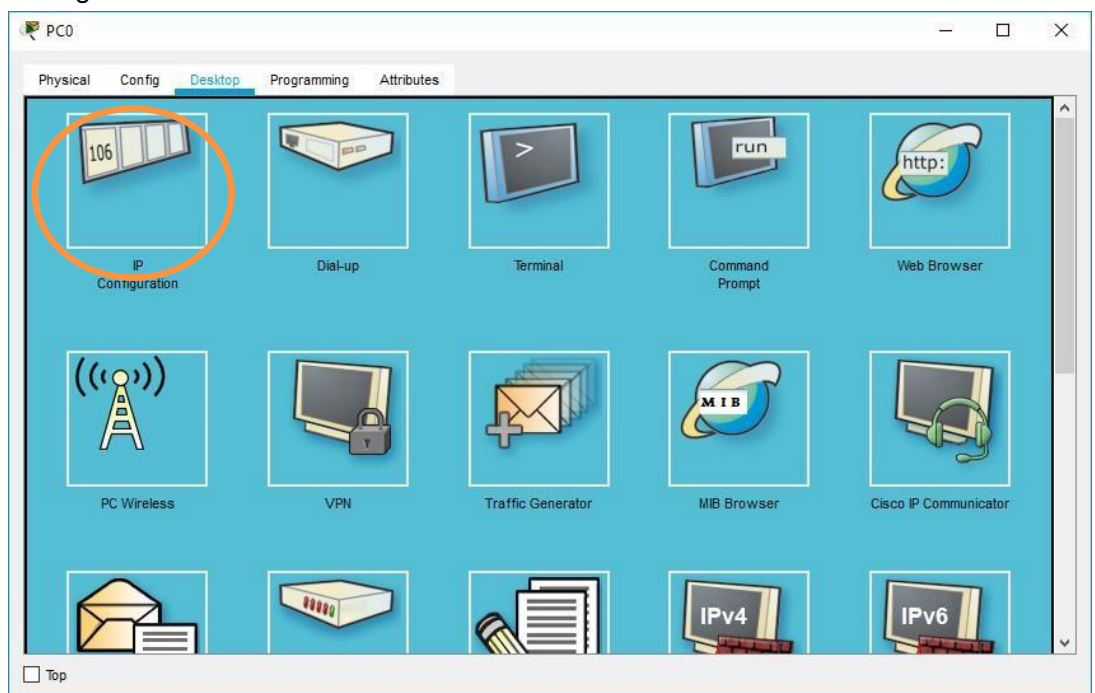


- b. Untuk konfigurasi dhcp server pada jendela properties server 0 pada services, pilih DHCP. Pastikan service DHCP On. Isikan blok IP address yang akan diberikan ke PC client.



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 the 'Static' radio button is unselected. The 'DHCP request successful' message is displayed. 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 IPv6 Address, Link Local Address (FE80::203:E4FF:FE8C:1E5B), IPv6 Gateway, and IPv6 DNS Server fields. The 802.1X section shows 'Use 802.1X Security' unchecked, Authentication set to MD5, and Username and Password fields.

PC0

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:FE8C:1E5B

IPv6 Gateway

IPv6 DNS Server

802.1X

☐ Use 802.1X Security

Authentication MD5

Username

Password

☐ Top

The screenshot shows the 'PC0' configuration window with the 'Desktop' tab selected. The 'DHCP' radio button is selected, and the 'Static' radio button is unselected. The 'DHCP request successful' message is displayed. 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 IPv6 Address, Link Local Address (FE80::203:E4FF:FE8C:1E5B), IPv6 Gateway, and IPv6 DNS Server fields. The 802.1X section shows 'Use 802.1X Security' unchecked, Authentication set to MD5, and Username and Password fields.

PC0

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:FE8C:1E5B

IPv6 Gateway

IPv6 DNS Server

802.1X

☐ Use 802.1X Security

Authentication MD5

Username

Password

☐ Top

Physical

Config

Desktop

Programming

Attributes

/4J DHCP

Static

DHCP request successful.

IP Address

Subnet Mask

Default Gateway

DNS Server

IPv6 Configuration

I DHCP

Auto Config

Static

Link Local Address

FE80::204:9AFF:FE26:EC1B

IPv6 Gateway

IPv6 DNS Server

802.1X

Use 802.1X Security

Authentication

Physical

Config

Desktop

Programming

Attributes

/4J DHCP

Static

DHCP request successful.

IP Address

Subnet Mask

Default Gateway

DNS Server

IPv6 Configuration

I DHCP

Auto Config

Static

Link Local Address

FE80::204:9AFF:FE26:EC1B

IPv6 Gateway

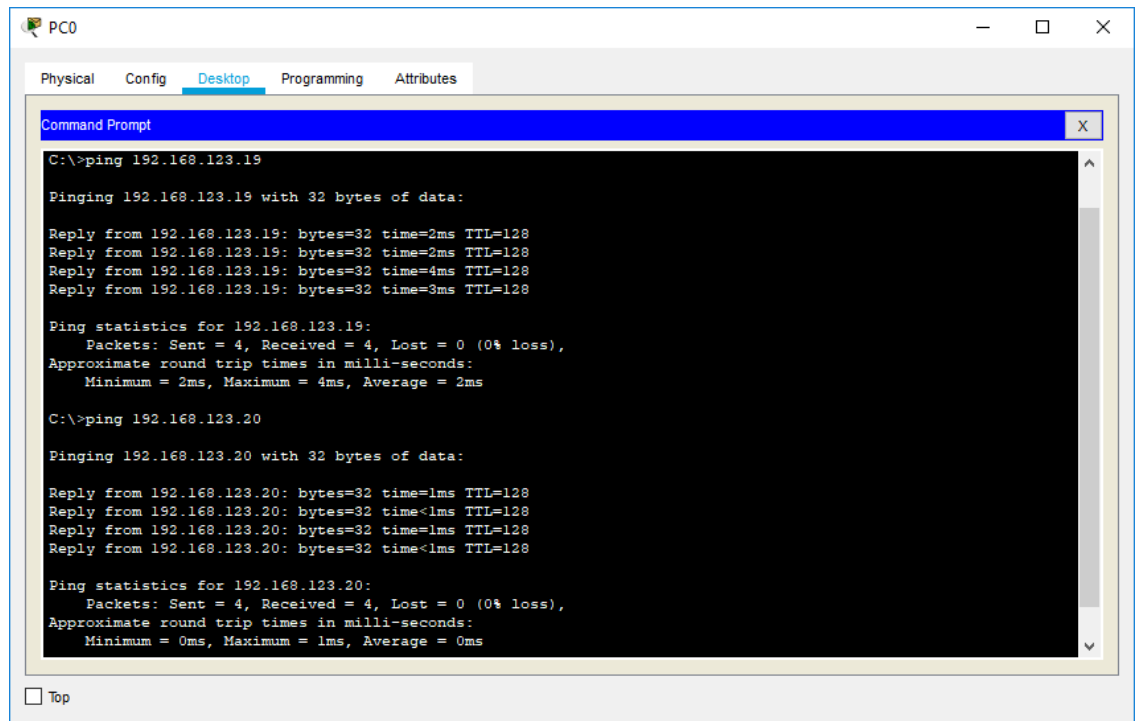
IPv6 DNS Server

802.1X

Use 802.1X Security

Authentication

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



The screenshot shows a Windows Command Prompt window titled "PC0" with tabs for Physical, Config, Desktop, Programming, and Attributes. The Desktop tab is active. The Command Prompt displays the following output:

```
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

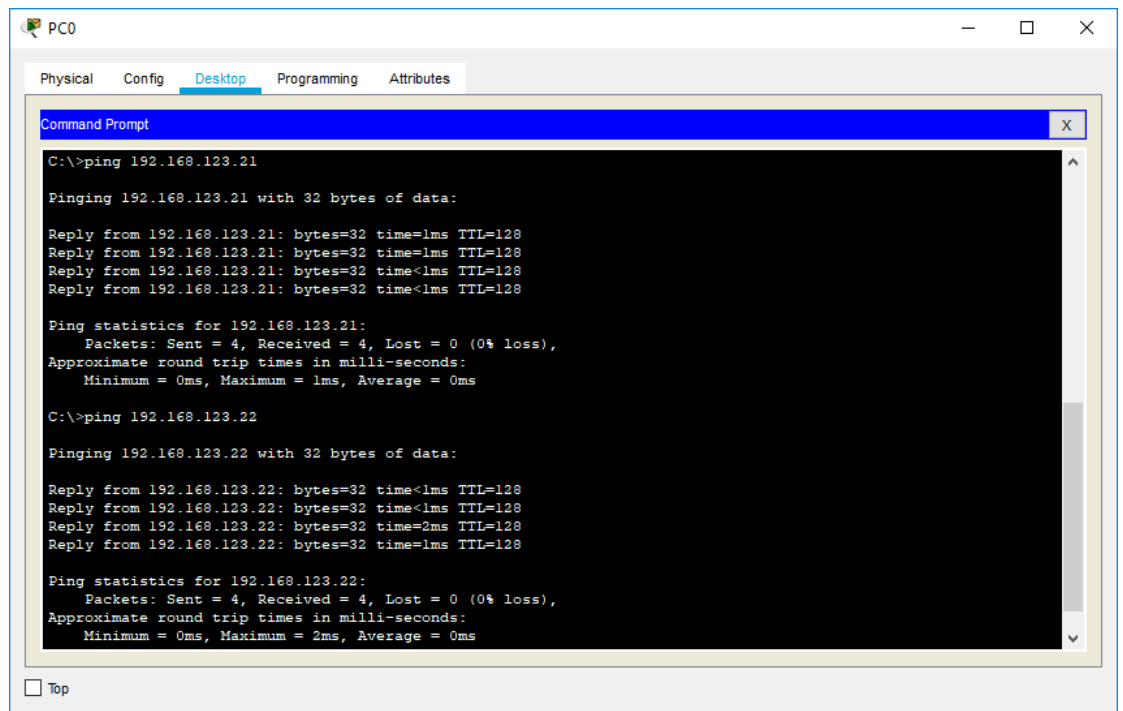
C:\>ping 192.168.123.20

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
```

At the bottom left of the Command Prompt window, there is a checkbox labeled "Top" which is currently unchecked.



The screenshot shows a Windows Command Prompt window titled "PC0" with tabs for Physical, Config, Desktop, Programming, and Attributes. The Desktop tab is active. The Command Prompt displays 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:

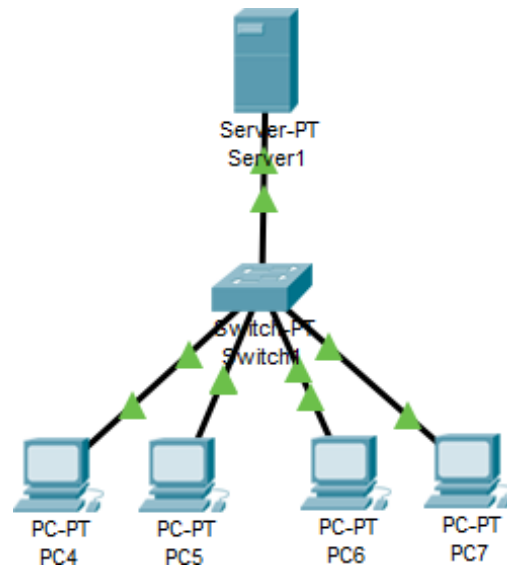
Reply from 192.168.123.22: bytes=32 time<1ms TTL=128
Reply from 192.168.123.22: bytes=32 time<1ms TTL=128
Reply from 192.168.123.22: bytes=32 time=2ms TTL=128
Reply from 192.168.123.22: bytes=32 time=1ms TTL=128

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
```

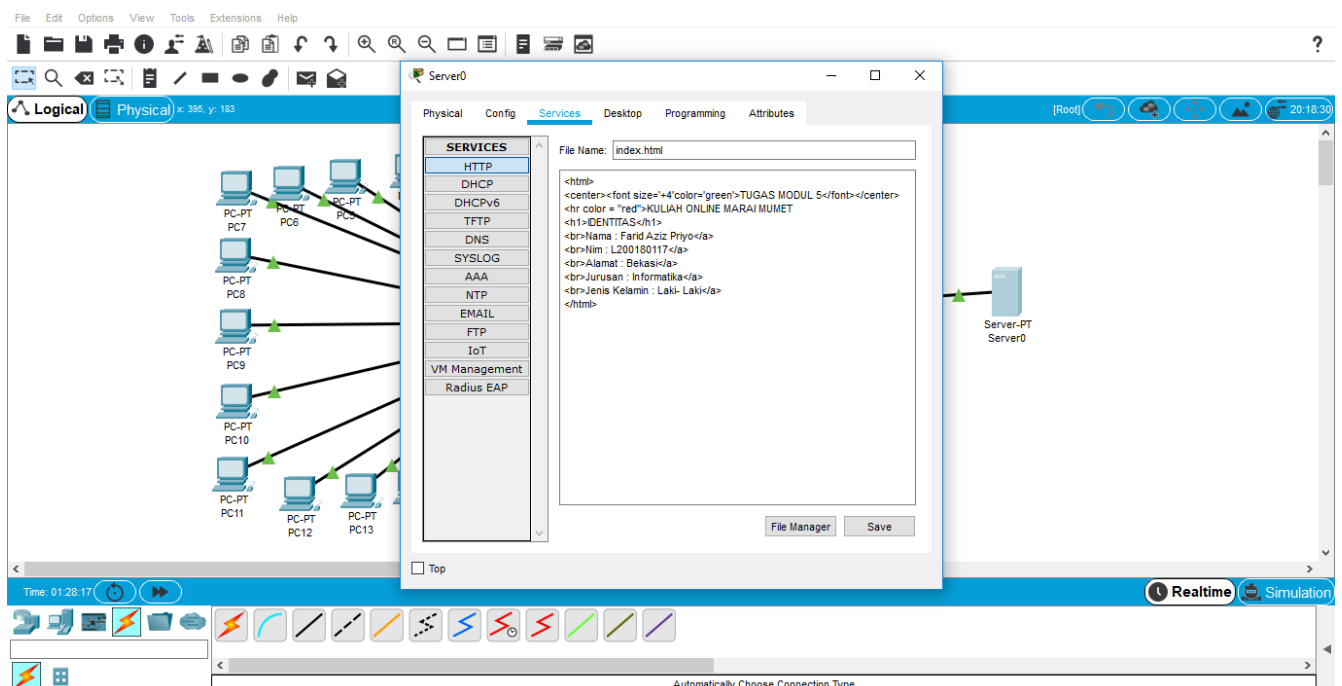
At the bottom left of the Command Prompt window, there is a checkbox labeled "Top" which is currently unchecked.

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.

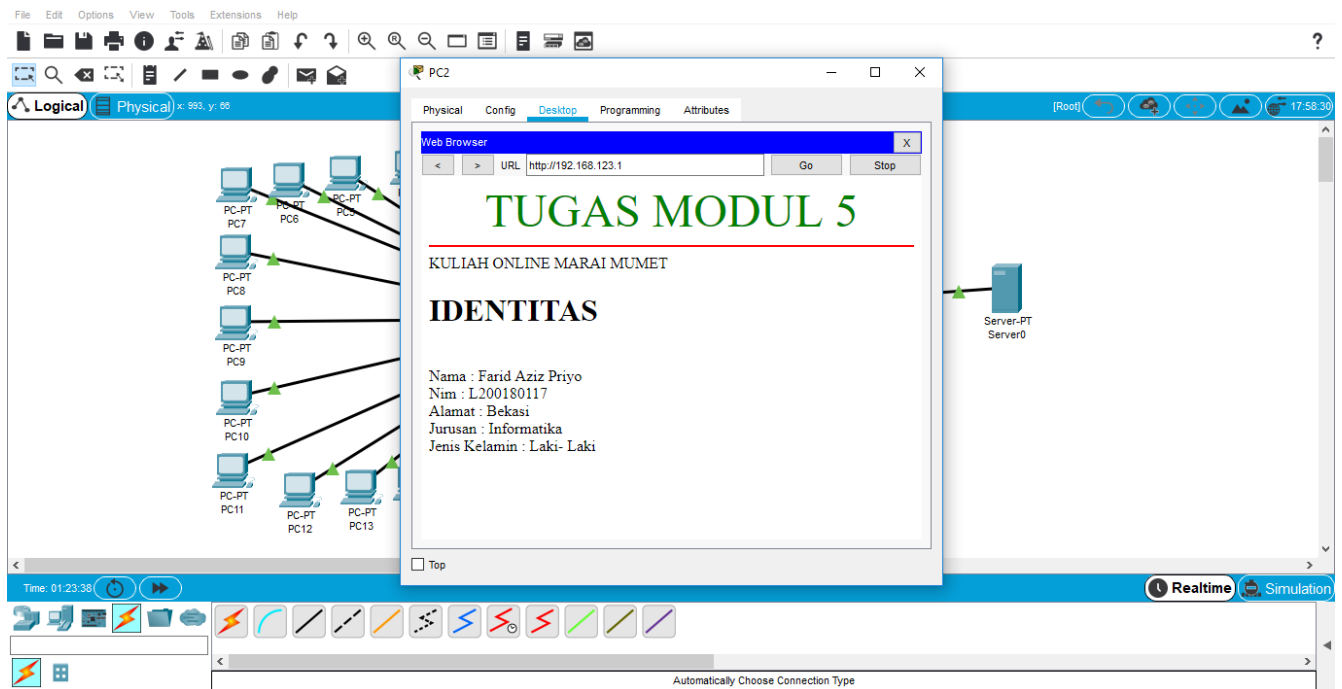


- Lakukan konfigurasi IP address pada PC0 seperti yang telah dijelaskan di bagian sebelumnya.
- Lakukan konfigurasi IP address pada Server0. Langkah-langkah mengkonfigurasi IP address. Untuk tipe Server-PT pada Cisco Packet Tracer sama dengan workstationnya. (PC-PT)
- Double-klik Server0 sehingga jendela properti Server0 muncul . Pindahkan ke tab Config. Pada menu kiri bagian Services, pilih HTTP. Pastikan radio button serverce HHTP 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.



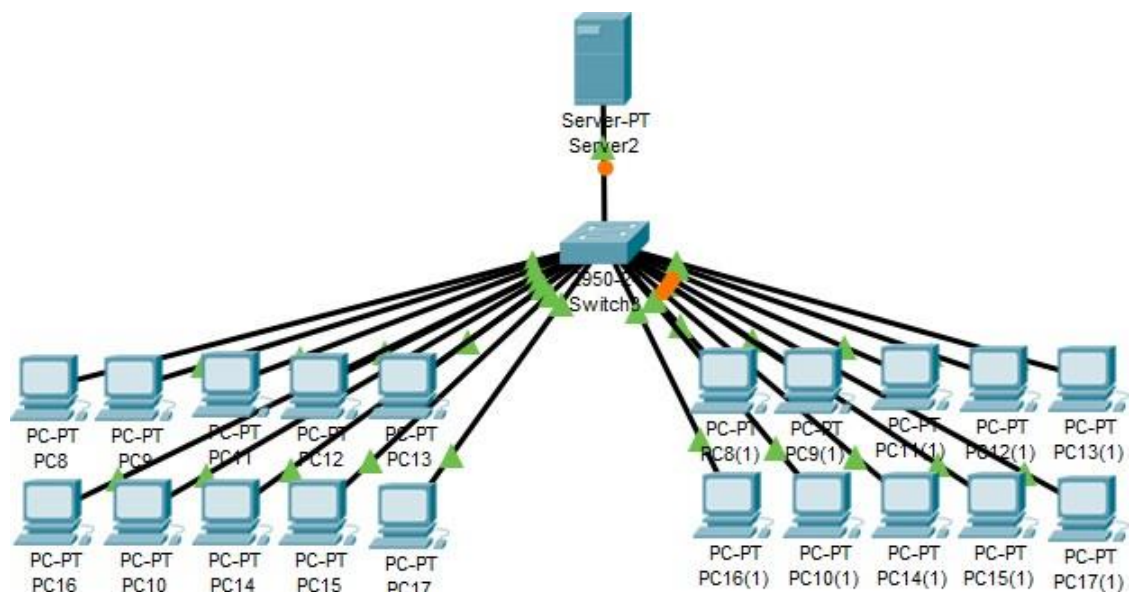
d. Melakukan Browsing HTTP

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' in Packet Tracer. The 'Desktop' tab is selected. The configuration is set to 'Static' for both IPv4 and IPv6. The IPv4 settings are: IP Address: 192.168.123.1, Subnet Mask: 255.255.255.0, Default Gateway: 192.168.123.1, and DNS Server: 0.0.0.0. The IPv6 settings are: IPv6 Address: (empty), Link Local Address: FE80::200:CFF:FE33:A586, IPv6 Gateway: (empty), and IPv6 DNS Server: (empty). The 802.1X section is also visible, with 'Use 802.1X Security' unchecked, Authentication set to MD5, and Username and Password fields empty.

Setting juga DHCP server di servernya.

The screenshot shows the 'Server2' configuration window with the 'Services' tab selected. On the left, a 'SERVICES' list has 'DHCP' highlighted. The main area is titled 'DHCP' and shows the 'FastEthernet0' interface with the 'Service' set to 'On'. The configuration includes a 'Pool Name' of 'serverPool', a 'Default Gateway' of '192.168.123.1', and a 'DNS Server' of '0.0.0.0'. The 'Start IP Address' is set to '192.168.123.19' and the 'Subnet Mask' is '255.255.255.0'. The 'Maximum Number of Users' is '20'. The 'TFTP Server' and 'WLC Address' are both '0.0.0.0'. Below the form is a table showing the DHCP pool configuration.

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

test ke clien PC.

The screenshot shows the 'PC8' configuration window with the 'Desktop' tab selected. The 'DHCP' radio button is selected, and a message 'DHCP request successful.' is displayed. The configuration shows the 'IP Address' as '192.168.123.19', 'Subnet Mask' as '255.255.255.0', 'Default Gateway' as '192.168.123.1', and 'DNS Server' as '0.0.0.0'. The 'IPv6 Configuration' section has 'Static' selected, with 'IPv6 Address' set to 'FE80::203:E4FF:FE9A:91A0'. The '802.1X' section has 'Use 802.1X Security' unchecked, with 'Authentication' set to 'MD5'.

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

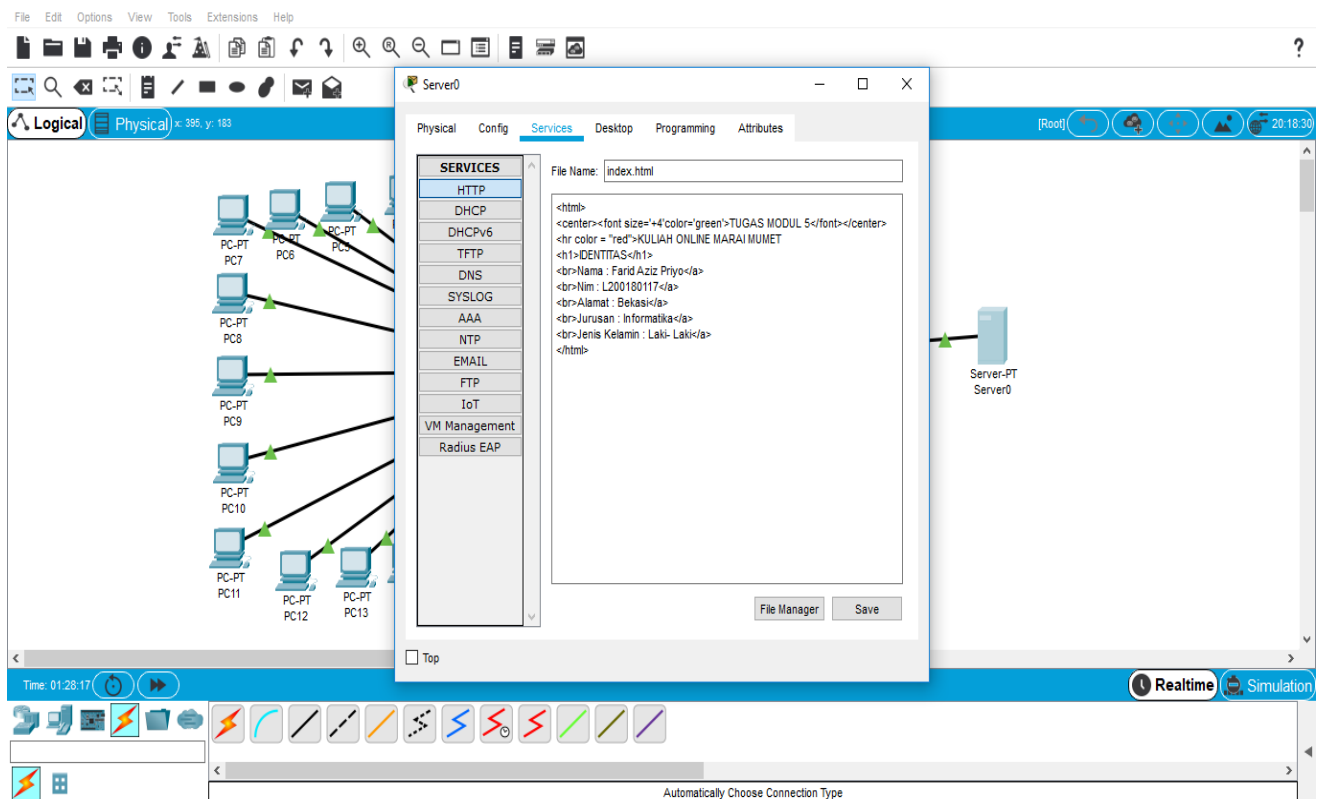
☐ Top

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



b. Lalu test di client kita

