LAPORAN PRAKTIKUM JARINGAN KOMPUTER

MODUL 9

"PENGENALAN STATIC NETWORK ADDRESS TRANSLATION PADA ROUTER CISCO"

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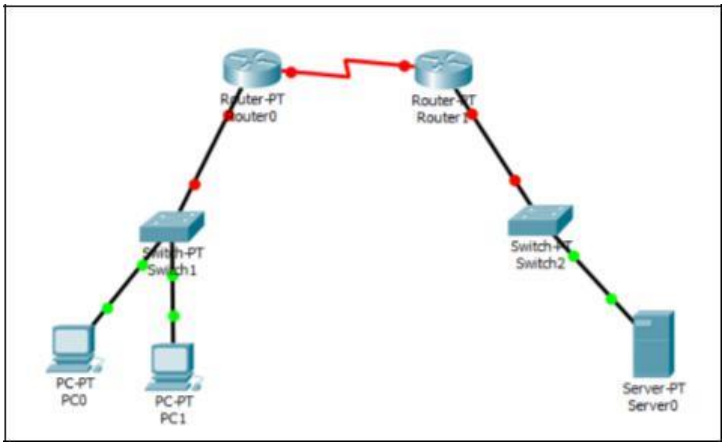
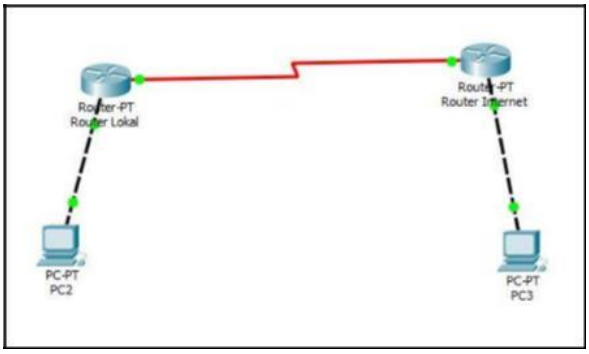
Kelas : C

Kegiatan Praktikum

1. Topologi praktek

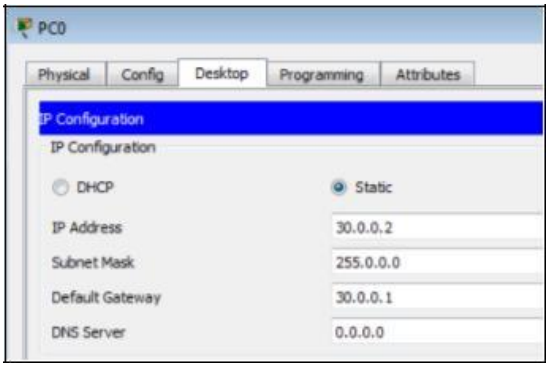


2. Buat topologi jaringan



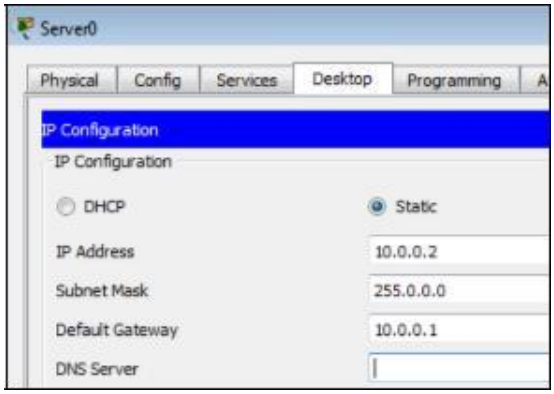
3. Catat kebutuhan IP

Address - PC0



c. PC1

- IP webserver



4. Konfigurasi router internet

```
Router>en
Router#conf term
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#hostname Internet
Internet(config)#int fa0/0
Internet(config-if)#ip address 10.0.0.1 255.0.0.0
Internet(config-if)#no shutdown

Internet(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

Internet(config-if)#exit
Internet(config)#int Se2/0
Internet(config-if)#ip address 20.0.0.2 255.0.0.0
Internet(config-if)#no shutdown

%LINK-5-CHANGED: Interface Serial2/0, changed state to down
Internet(config-if)#exit
Internet(config)#
Internet(config)#ip route 30.0.0.0 255.0.0.0 20.0.0.1
Internet(config)#ip nat inside source static 10.0.0.2 50.0.0.1
Internet(config)#int fa0/0
Internet(config-if)#ip nat inside
Internet(config-if)#exit
Internet(config)#int se2/0
Internet(config-if)#ip nat outside
Internet(config-if)#exit
```

5. Konfigurasi router lokal

```
Router#conf term
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#hostname Lokal
Lokal(config)#int fa0/0
Lokal(config-if)#ip address 30.0.0.1 255.0.0.0
Lokal(config-if)#no shutdown

Lokal(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
exit
Lokal(config)#exit
Lokal#
%SYS-5-CONFIG_I: Configured from console by console

Lokal#conf term
Enter configuration commands, one per line.  End with CNTL/Z.
Lokal(config)#int se2/0
Lokal(config-if)#ip address 20.0.0.1 255.0.0.0
Lokal(config-if)#clock rate 64000
Lokal(config-if)#bandwith 64
                  ^
% Invalid input detected at '^' marker.

Lokal(config-if)#bandwidth 64
Lokal(config-if)#no shutdown

Lokal(config-if)#
%LINK-5-CHANGED: Interface Serial2/0, changed state to up

Lokal(config-if)#exit
Lokal(config)#ip route 50.0.0.0 255.0.
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/0, changed state to up
                                ^
% Invalid input detected at '^' marker.

Lokal(config)#ip route 50.0.0.0 255.0.0.0 20.0.0.2
Lokal(config)#exit
```

6. Uji koneksi dari PC lokal ke web server
   - Ping pertama lakukan dengan ping terhadap IP asli dari web server (10.1.1.2)

```
C:\>ping 10.0.0.2

Pinging 10.0.0.2 with 32 bytes of data:

Reply from 30.0.0.1: Destination host unreachable.
Reply from 30.0.0.1: Destination host unreachable.
Reply from 30.0.0.1: Destination host unreachable.
Reply from 30.0.0.1: Destination host unreachable.

Ping statistics for 10.0.0.2:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
```

   - Ping kedua lakukan dengan ping terhadap IP publik dari web server (50.0.0.1)

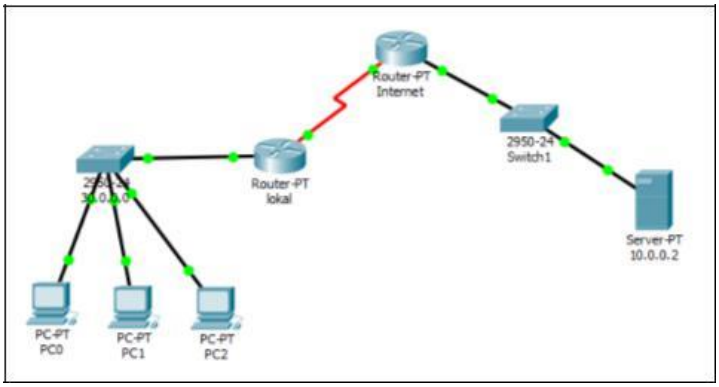
```
C:\>ping 50.0.0.1

Pinging 50.0.0.1 with 32 bytes of data:

Reply from 50.0.0.1: bytes=32 time=2ms TTL=126
Reply from 50.0.0.1: bytes=32 time=2ms TTL=126
Reply from 50.0.0.1: bytes=32 time=1ms TTL=126
Reply from 50.0.0.1: bytes=32 time=10ms TTL=126

Ping statistics for 50.0.0.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 1ms, Maximum = 10ms, Average = 3ms
```

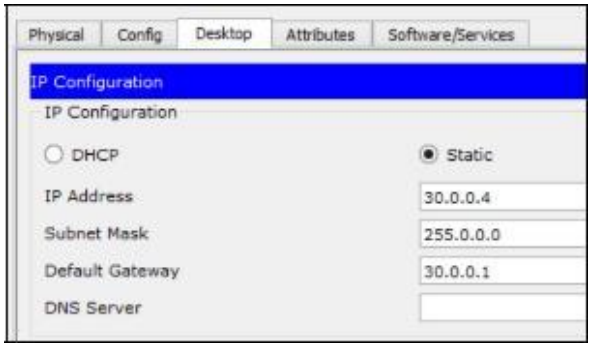
7. Kembangkan topologi dari poin 1 menjadi topologi seperti gambar dibawah ini:



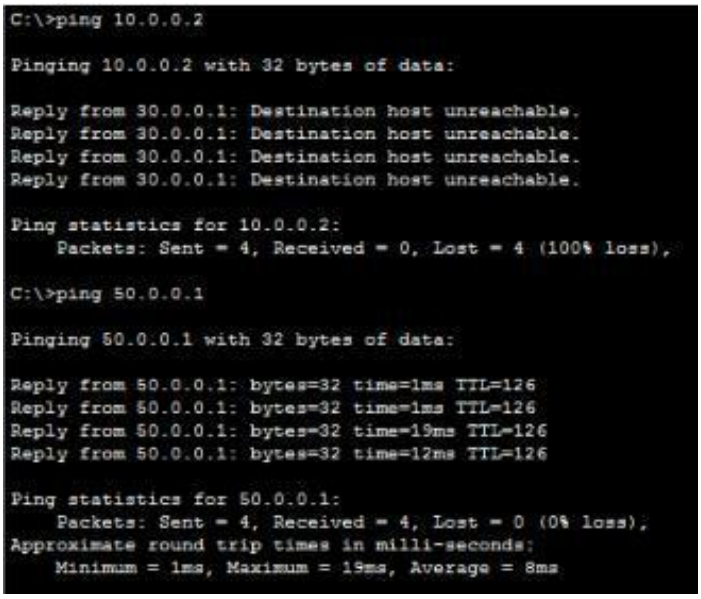
Dengan langkah yang sama, konfigurasikan topologi diatas supaya PC1 dan PC2 dapat terkoneksi dengan server (10.0.2) melalui IP publik

- Konfigurasi PC1

- Konfigurasi PC2



- Uji koneksi PC1



- Uji Koneksi PC2