

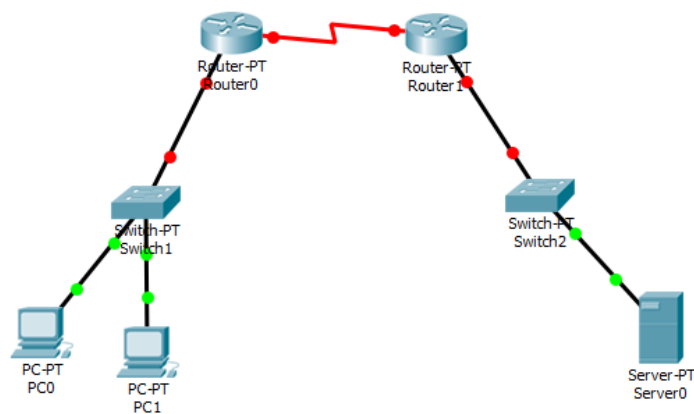
NAMA = CORRY LUQMA ZUNIRA

KELAS = D

NIM = L200170152

Modul 9

Pengenalan Static Network Address Translation pada Router Cisco.



Konfigurasi Router Internet.

Setelah kebutuhan IP dialokasikan, urutan langkah-langkah berikutnya sebagai berikut:

- mengkonfigurasi router Internet,
- merubah nama hostname,
- konfigurasi IP untuk serial 0 dan Ethernet 0
- mengaktifkan routing tabel agar router mengenali network 30.0.0.0
- mengaktifkan NAT Source Static untuk IP 10.0.0.2(milik web server) pada jaringan 10.0.0.0 agar di translasikan menjadi 50.0.0.1
- mengaktifkan NAT inside untuk port Ethernet 0 NAT outside untuk serial 0.

Router Internett

Physical Config CLI Attributes

IOS Command Line Interface

```
Press RETURN to get started!

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

Internett(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

Internett(config-if)#exit
Internett(config)#int se2/0
Internett(config-if)#ip address 20.0.0.2 255.0.0.0
Internett(config-if)#no shutdown

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

% Invalid input detected at '^' marker.

Internett(config)#int se2/0
Internett(config-if)#ip nat outside
Internett(config-if)#exit
Internett(config)#

Ctrl+F6 to exit CLI focus
```

Router Lokall

Physical Config CLI Attributes

IOS Command Line Interface

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

Lokall(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

Lokall(config-if)#exit
Lokall(config)#int se2/0
Lokall(config-if)#ip address 20.0.0.1 255.0.0.0
Lokall(config-if)#clock rate 64000
Lokall(config-if)#bandwidth 64
Lokall(config-if)#no shutdown

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

Lokall(config-if)#exit
Lokall(config)#ip route 50.0
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/0, changed state to up

% Invalid input detected at '^' marker.

Lokall(config)#ip route 50.0.0.0 255.0.0.0 20.0.0.2
Lokall(config)#exit
Lokall#
%SYS-5-CONFIG_I: Configured from console by console

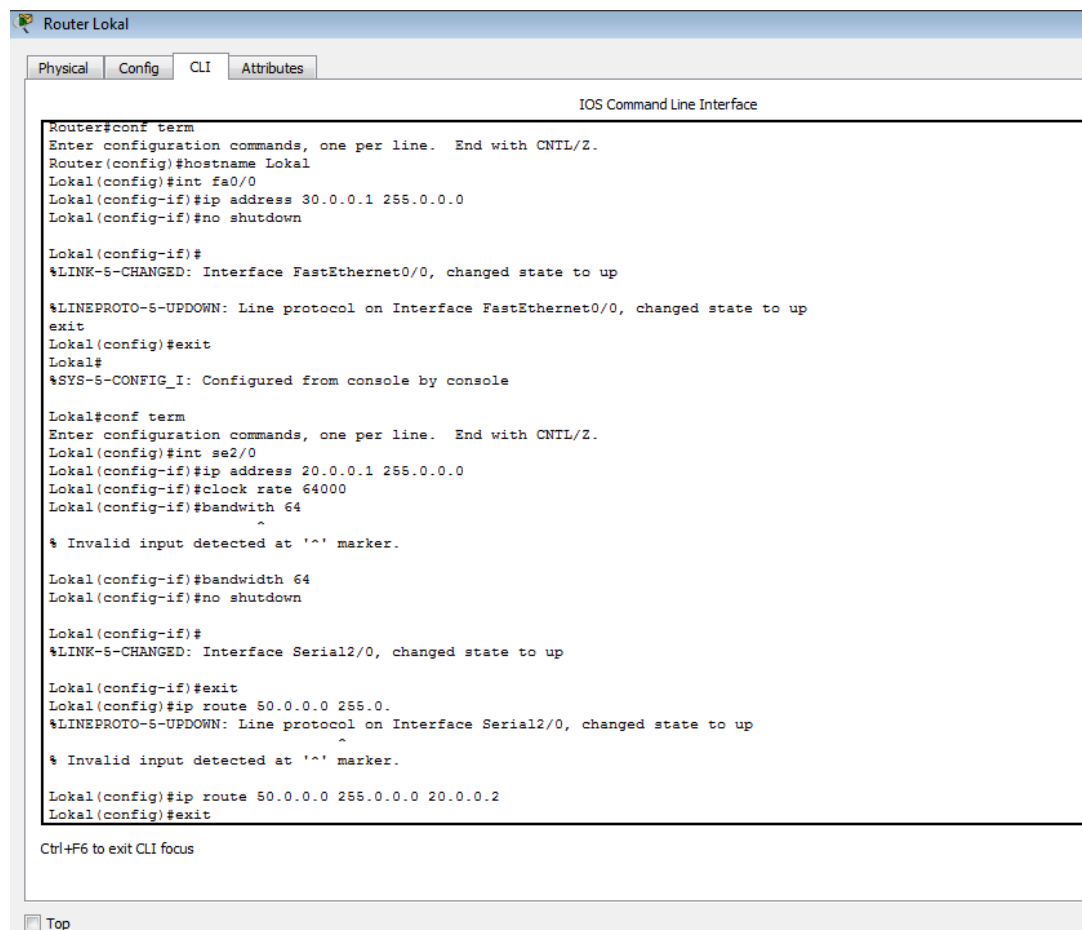
Lokall#

Ctrl+F6 to exit CLI focus
```

5. Konfigurasi Router Lokal.

Sedangkan urutan untuk konfigurasi router lokal adalah sebagai berikut :

- Mengganti nama host dari Router menjadi Lokal.
- Mengonfigurasi port ethernet 0(interface ethernet 0) dan memberi IP 30.0.0.1 subnet 255.0.0.0 (ip address 30.0.0.1 255.0.0.0) kemudian mengaktifkan port Ethernet 0(no shutdown)
- Mengonfigurasi port serial 0(Interface serial 0) dan memberi IP (ip address 20.0.0.1 255.0.0.0) kemudian mengaktifkan dengan perintah no shutdown.
- Mengaktifkan clockrate (clockrate 64000) dan bandwidth(bandwidth 64) proses ini masih berada dalam mode prompt interface (config-if)
- Memberikan tabel routing statis agar jaringan lokal dapat berhubungan dengan jaringan internet dan web server dengan perintah(ip route 50.0.0.0 255.0.0.0 20.0.0.2) .



```
Router Lokal
Physical Config CLI Attributes
IOS Command Line Interface

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-S-CHANGED: Interface FastEthernet0/0, changed state to up

%LINEPROTO-S-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)#bandwidth 64
^
% Invalid input detected at '^' marker.

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

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

Lokal(config-if)#exit
Lokal(config)#ip route 50.0.0.0 255.0.0.0
%LINEPROTO-S-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

Ctrl+F6 to exit CLI focus

Top
```

Router Internet

Physical Config CLI Attributes

IOS Command Line Interface

System Configuration Dialog

Would you like to enter the initial configuration dialog? [yes/no]: no

Press RETURN to get started!

```
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

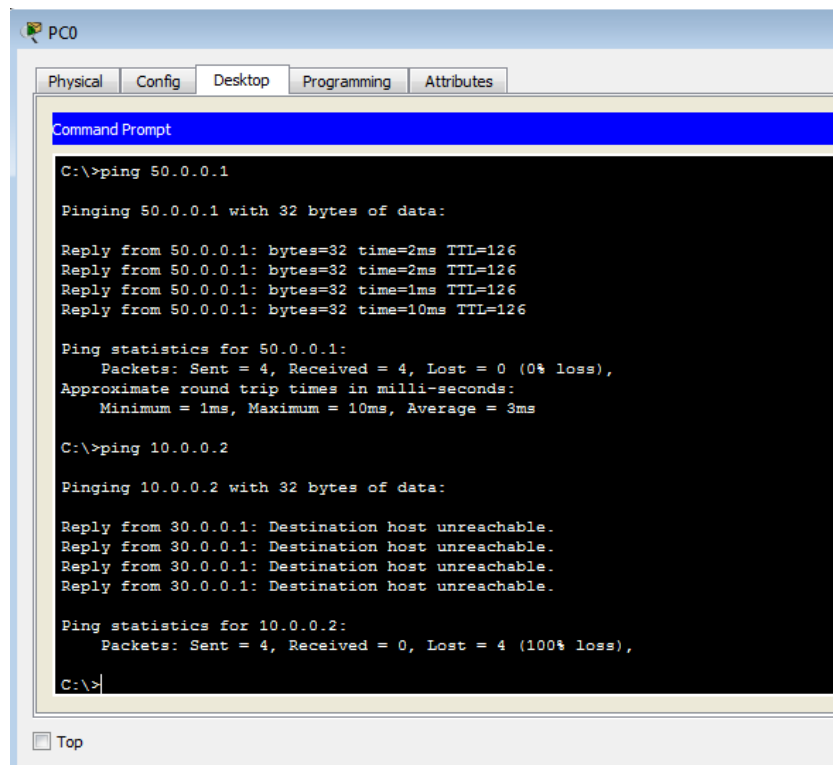
Internet(config-if)#exit
Internet(config)#int se2/0
Internet(config-if)#ip address 20.0.0.2 255.0.0.0
Internet(config-if)#no shutdown

%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
Internet(config)#
```

Ctrl+F6 to exit CLI focus

Top

6. Uji coba koneksi dari PC-lokal ke web server.



```
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

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),
```

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

