PERTEMUAN VII

ROUTER BASIC CONFIGURATION LANJUTAN

TUJUAN PRAKTIKUM

a. Mahasiswa dapat mengenal dan memahami cisco packet tracer sebagai aplikasi simulasi jaringan komputer.

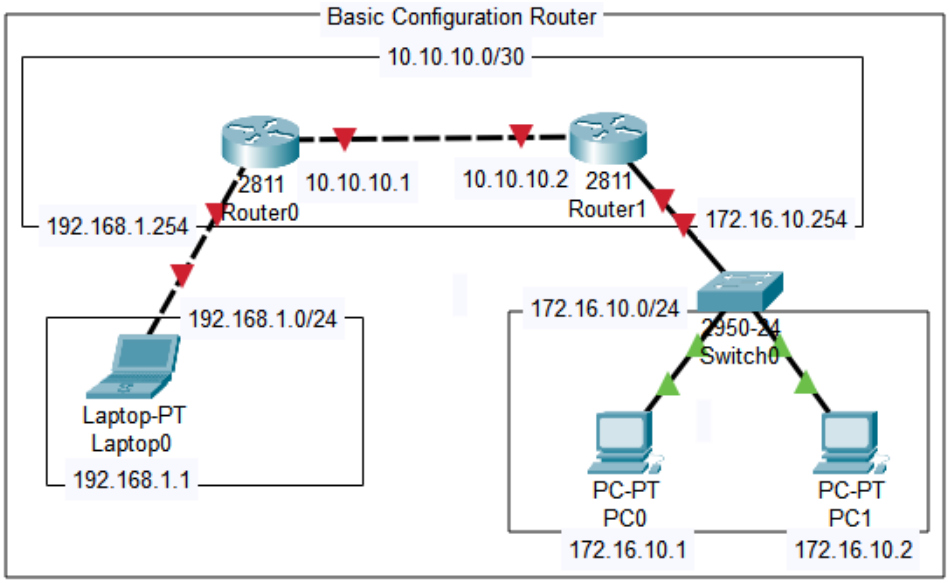
b. Mahasiswa dapat menjelaskan dan menggunakan cisco packet tracert untuk keperluan simulasi jaringan komputer seperti : Konfigurasi dasar router, console password, telnet.

TEORI DASAR

Dalam basic kongfigurasi membahas mengenai management jaringan, sangat dibutuhkan untuk mengelola jaringan skala besar contohya dengan memberikan password, dan juga memberikan deskripsi interface untuk mempermudah dalam mengatehui tujuan setiap interface.

TUGAS PRAKTIKUM

Topologi



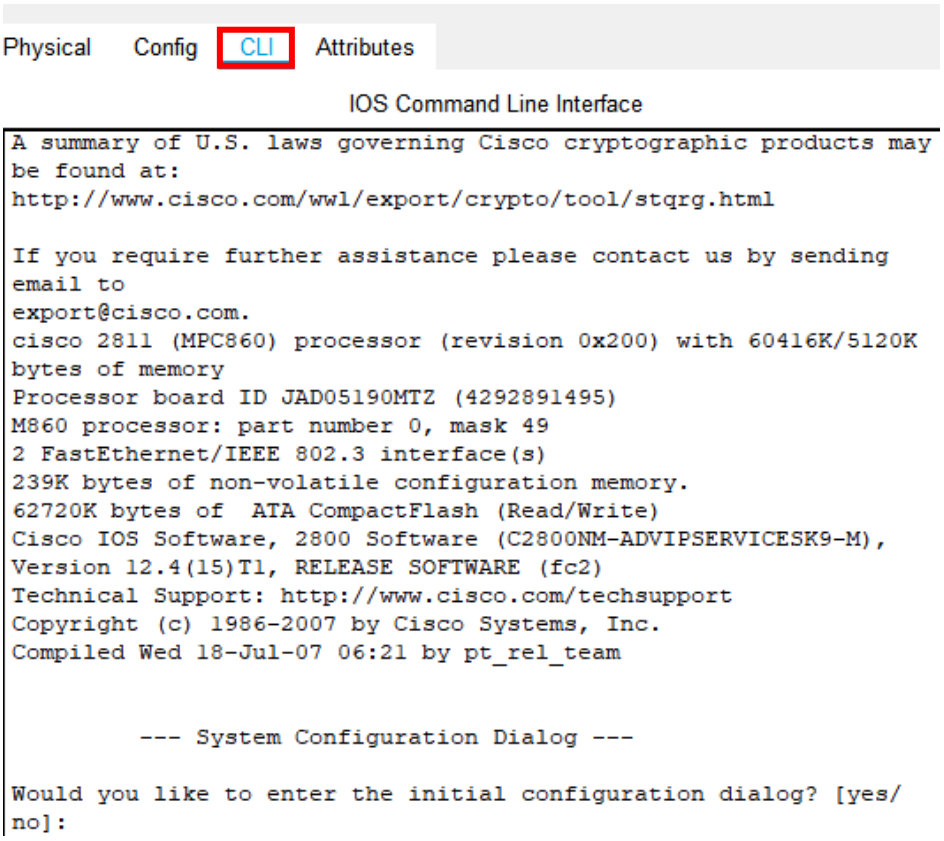
Tabel Addressing

Device	Interface	IP Address	Subnet Mask	Default Gateway
Router0	NIC Fa 0/0	10.10.10.1	255.255.255.252	N/A
	NIC Fa 0/1	192.168.1.254	255.255.255.0	N/A
Router1	NIC Fa 0/0	10.10.10.2	255.255.255.252	N/A
	NIC Fa 0/1	172.16.10.254	255.255.255.0	N/A
Laptop0	NIC	192.168.1.1	255.255.255.0	192.168.1.254
PC0	NIC	172.16.10.1	255.255.255.0	172.16.10.254
PC1	NIC	172.16.10.2	255.255.255.0	172.16.10.254

Konfigurasi

a. Pada CPT (Cisco Packet Tracer) sebetunya bisa langsung akses router tanpa menggunakan kabel console, akan tetapi untuk simulasi tidak untuk lapangan, dilapangan/realnya haruss menggunakan kabel console.

Di Router0 pilih tab > CLI



b. Pilih “no” dan buat nama device router menjadi Router0 dengan perintah hostaname pada global configuration mode seperti berikut.

```
Router>
Router>enable
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#hostname Router0
Router0(config)#
```

c. Setting password Privilage mode

```
Router0(config)#enable secret cisco
Router0(config)#
```

d. Setting password console

```
Router0(config)#line console 0
Router0(config-line)#password ciscocon
Router0(config-line)#login
Router0(config-line)#
```

e. Kembali ke global configuration mode

```
Router0(config-line)#exit
Router0(config)#
```

f. Setting telnet

```
Router0(config)#line vty 0 4
Router0(config-line)#password ciscovty
Router0(config-line)#login
Router0(config-line)#
```

g. Buat banner yang berisikan peringatan untuk user yang dilarang masuk

```
Router0(config)#banner motd # JANGAN MASUK #
Router0(config)#
```

h. Setting IP untuk interface Fa 0/1

```
Router0(config)#

Router0(config)#interface fastethernet 0/1

Router0(config-if)#description LINK TO LAPTOP-0 "Informasi interface"

Router0(config-if)#ip address 192.168.1.254 255.255.255.0

Router0(config-if)#no shutdown "aktifkan interface"

Router0(config-if)#

%LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface
FastEthernet0/1, changed state to up

Router0(config-if)#exit "kembali ke global configuration"

Router0(config)#exit "kembali ke privilege exec"

Router0#

%SYS-5-CONFIG_I: Configured from console by console

Router0#
```

Catatan : "tulisan merah" adalah keterangan perintah cisco

i. Simpan/Save konfigurasi router

```
Router0#write memory

Building configuration...

[OK]
```

j.Lihat konfigurasi show run

```
Router0#show running-config
Building configuration...

Current configuration : 719 bytes
!
version 12.4
no service timestamps log datetime msec
no service timestamps debug datetime msec
no service password-encryption
!
hostname Router0
!
!
!
enable secret 5 $1$mERr$hx5rVt7rPNoS4wqbXKX7m0
!
!
!
!
!
!
ip cef
no ipv6 cef
!
!
!
!
!
!
!
!
!
!
!
!
spanning-tree mode pvst
!
!
!
!
!
!
```

```
interface FastEthernet0/0
 no ip address
 duplex auto
 speed auto
 shutdown
!
interface FastEthernet0/1
 description LINK TO Laptop0
 ip address 192.168.1.254 255.255.255.0
 duplex auto
 speed auto
!
interface Vlan1
 no ip address
 shutdown
!
ip classless
!
ip flow-export version 9
!
!
!
banner motd ^CJANGAN MASUK^C
!
!
!
!
!
line con 0
 password ciscocon
 login
!
line aux 0
!
line vty 0 4
 password ciscovty
 login
!
!
```

```
!
end


Router0#
```

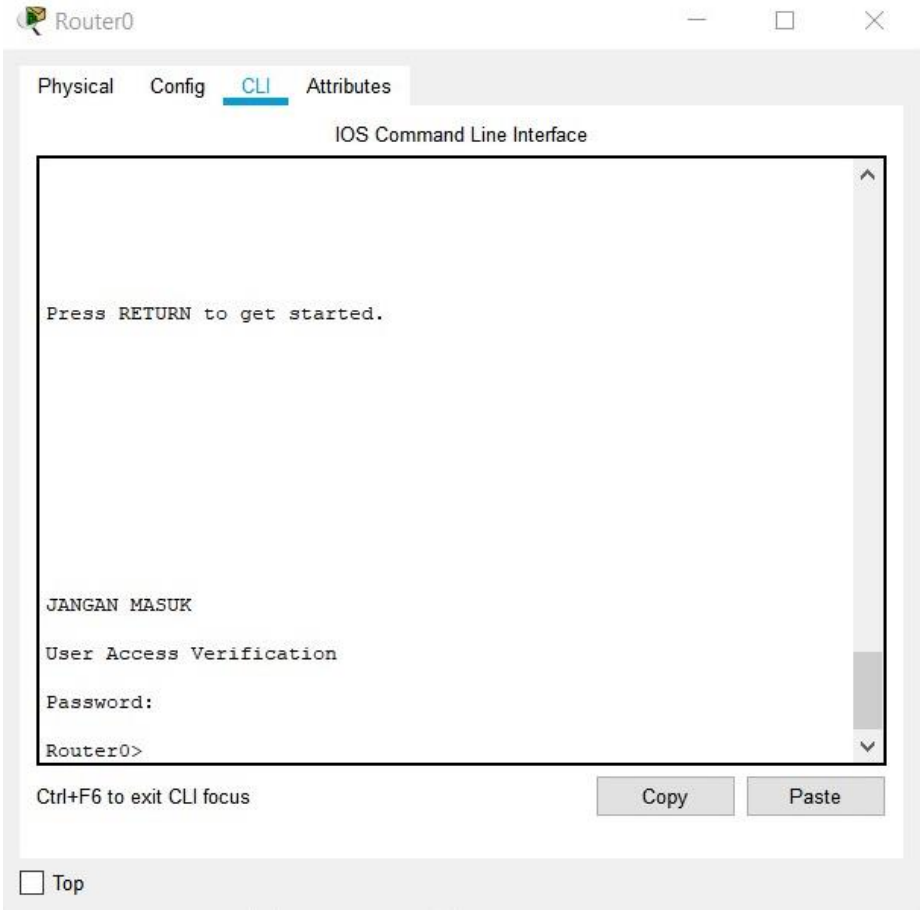
k. Setting IP pada Laptop0

Catatan : Agar password console dan telnet terenkripsi dapat dilakukan dengan perintah **Router0(config)#service password-encryption**.

Agar telnet aktif, password privilege harus aktif dengan perintah **enable secret**

Verifikasi

Buka CLI (Console) di Router0 untuk password console



Masuk ke privilege mode

```
Router0>enable
Password:
Router0#
```

Test ping dari Router0 ke Laptop0

```
Router0#ping 192.168.1.1

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.1.1, timeout is 2
seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/0/1
ms

Router0#
```

Test ping dari Laptop0 ke Router0

Command Prompt

```
C:\>ping 192.168.1.254

Pinging 192.168.1.254 with 32 bytes of data:

Reply from 192.168.1.254: bytes=32 time<1ms TTL=255
Reply from 192.168.1.254: bytes=32 time<1ms TTL=255
Reply from 192.168.1.254: bytes=32 time=1ms TTL=255
Reply from 192.168.1.254: bytes=32 time<1ms TTL=255

Ping statistics for 192.168.1.254:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 1ms, Average = 0ms
```

Uji coba Telnet

```
C:\>telnet 192.168.1.254
Trying 192.168.1.254 ...OpenJANGAN MASUK


User Access Verification

Password:
Router0>
```