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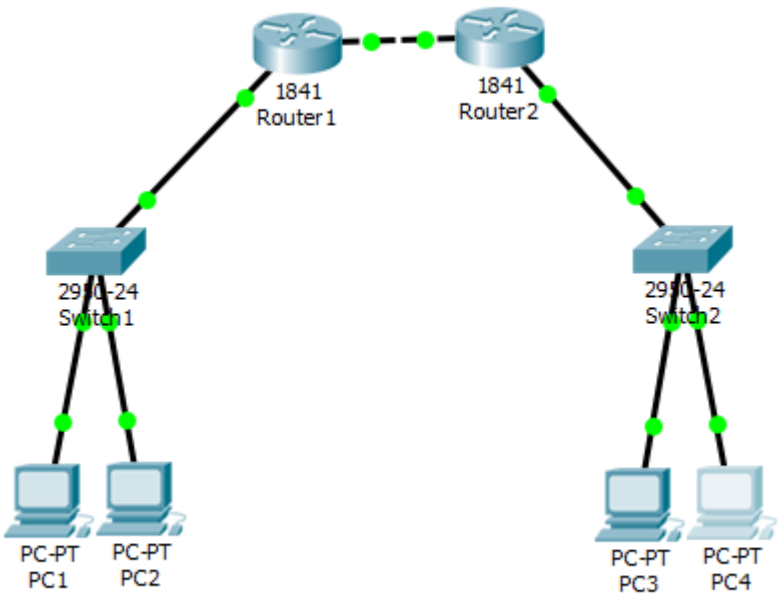
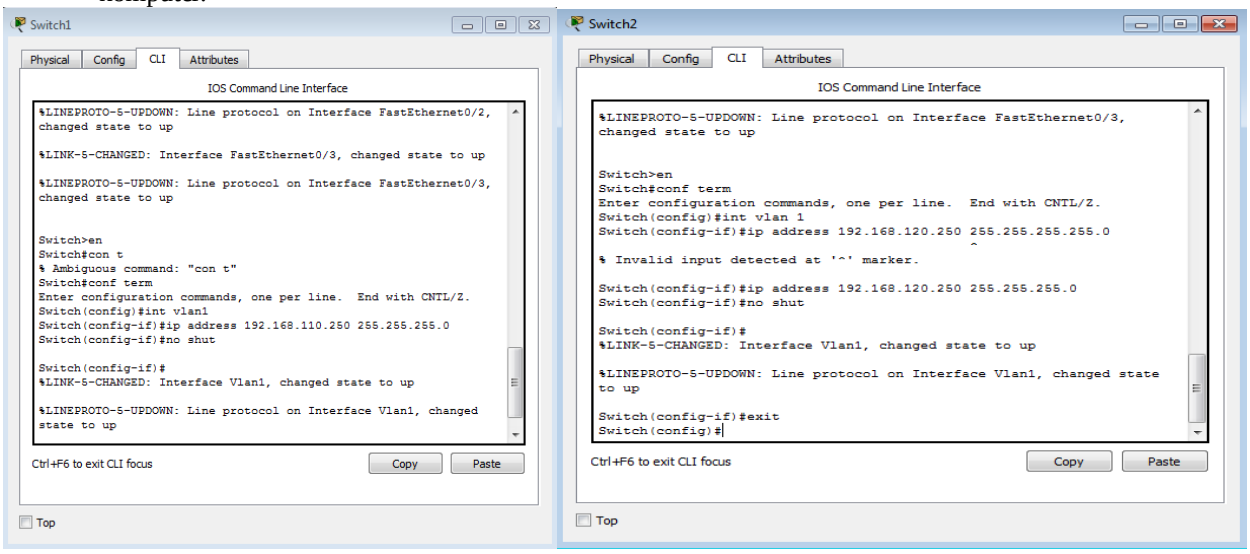
KEGIATAN PRAKTIKUM JARINGAN KOMPUTER
MODUL 8

KEGIATAN 1.

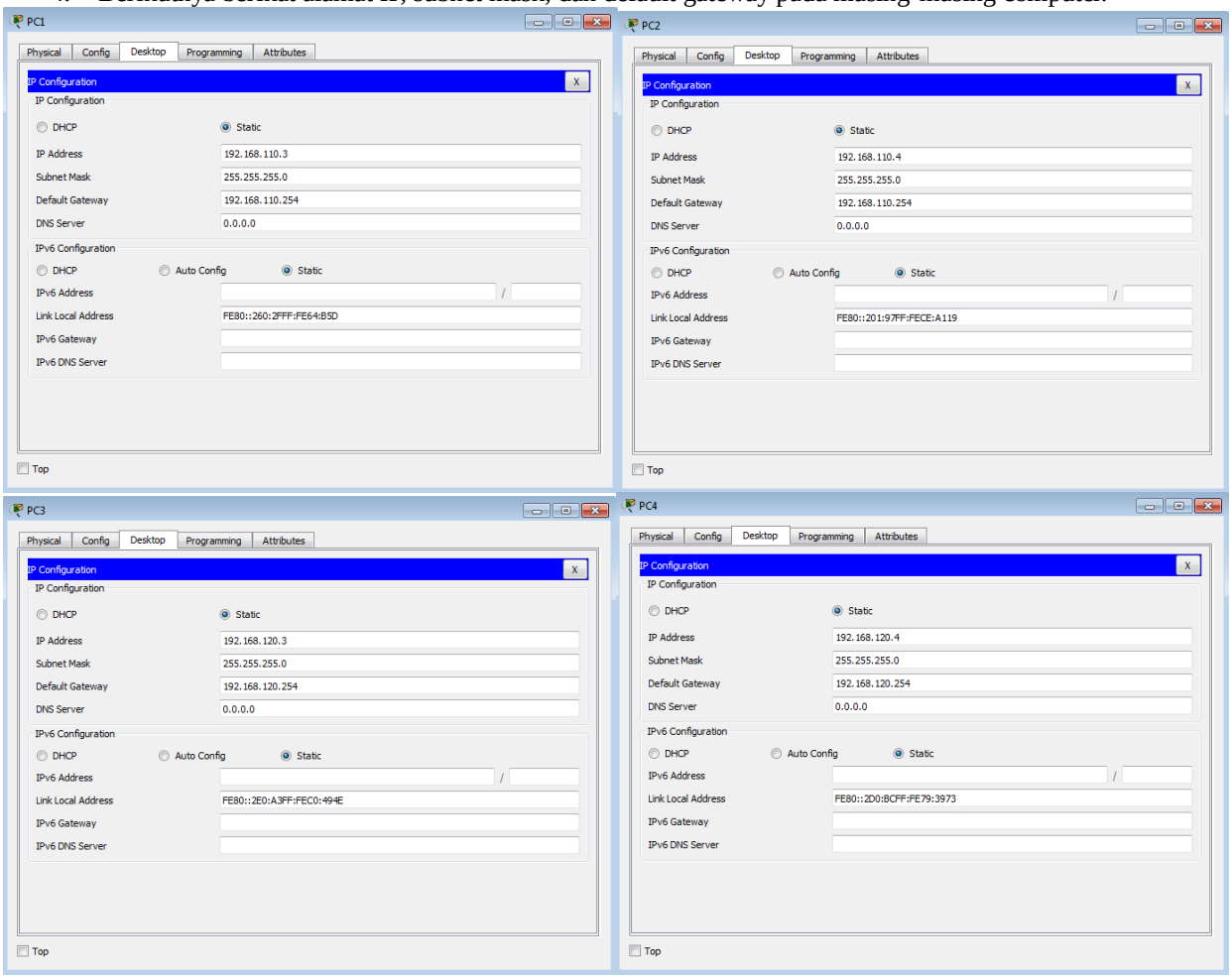
1. Desain jaringan :



3. Khusus untuk Switch1 dan Switch2 berikan alamat IP untuk digunakan sebagai default gateway bagi semua komputer.



4. Berikutnya berikat alamat IP, subnet mask, dan default gateway pada masing-masing computer.



7. Routing protocol RIP pada kedua jaringan.

```
Router(config)#router rip
Router(config-router)#network 192.168.110.0
Router(config-router)#network 192.168.10.0
Router(config-router)#^Z
Router#
%SYS-5-CONFIG_I: Configured from console by console
```

8. pada Router1 berikan network ID 192.168.110.0 dan 192.168.10.0 untuk digunakan sebagai jalur routing. Sedangkan pada Router2 diberikan network ID 192.168.120.0 dan 192.168.20.0 untuk digunakan sebagai jalur routing.

```
Router(config)#router rip
Router(config-router)#network 192.168.120.0
Router(config-router)#networ 192.168.10.0
Router(config-router)#network 192.168.10.0
Router(config-router)#^Z
Router#
%SYS-5-CONFIG_I: Configured from console by console
```

9. Lakukan pengecekan table dengan menggunakan perintah *"show ip route"*

```
Router#sh ip route
Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile,
B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter
area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external
type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2, E -
EGP
       i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia -
IS-IS inter area
       * - candidate default, U - per-user static route, o - ODR
       P - periodic downloaded static route

Gateway of last resort is not set

C    192.168.10.0/24 is directly connected, FastEthernet0/1
C    192.168.110.0/24 is directly connected, FastEthernet0/0
```

```
Router#sh ip route
Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile,
B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter
area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external
type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2, E -
EGP
       i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia -
IS-IS inter area
       * - candidate default, U - per-user static route, o - ODR
       P - periodic downloaded static route

Gateway of last resort is not set

C    192.168.10.0/24 is directly connected, FastEthernet0/0
C    192.168.120.0/24 is directly connected, FastEthernet0/1
```

10. Lakukan tes koneksi dari PC1 ke PC4 dengan menggunakan perintah Ping.

```
C:\>ping 192.168.120.4

Pinging 192.168.120.4 with 32 bytes of data:

Reply from 192.168.110.254: Destination host unreachable.
Reply from 192.168.110.254: Destination host unreachable.
Reply from 192.168.110.254: Destination host unreachable.
Reply from 192.168.110.254: Destination host unreachable.

Ping statistics for 192.168.120.4:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
```

11. Tentukan access-list yang akan diterapkan dalam jaringan.

```
Router#conf term
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#access-list 10 permit 192.168.120.0 0.0.255.255
Router(config)#end
Router#
%SYS-5-CONFIG_I: Configured from console by console
```

12. Terapkan Access List ke interface [Router1].

```
Router#conf term
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#int e1
                     ^
% Invalid input detected at '^' marker.

Router(config)#Interface FastEthernet0/1
Router(config-if)#ip access-group 10 out
Router(config-if)#^Z
Router#
%SYS-5-CONFIG_I: Configured from console by console
```

14. Lihat konfigurasi Access List pada Router1.

```
Router#sh access-lists
Standard IP access list 10
    10 permit 192.168.0.0 0.0.255.255
```

15. Lihat konfigurasi Access List pada Ethernet1 dengan perintah ***"show running-config"***

```
Router#sh running-config
Building configuration...

Current configuration : 686 bytes
!
version 12.4
no service timestamps log datetime msec
no service timestamps debug datetime msec
no service password-encryption
!
hostname Router
!
!
!
!
!
!
!
!
ip cef
no ipv6 cef
!
!
!

ip classless
!
ip flow-export version 9
!
!
access-list 10 permit 192.168.0.0 0.0.255.255
!
!
!
!
!
line con 0
!
line aux 0
!
line vty 0 4
 login
!
!
!
end
```

```
spanning-tree mode pvst
!
!
!
!
!
!
interface FastEthernet0/0
 ip address 192.168.110.254 255.255.255.0
 duplex auto
 speed auto
!
interface FastEthernet0/1
 ip address 192.168.10.1 255.255.255.0
 duplex auto
 speed auto
!
interface Vlan1
 no ip address
 shutdown
!
router rip
 network 192.168.10.0
 network 192.168.110.0
```

16. Lakukan tes koneksi dua arah antara PC3 dengan PC1 yang berada pada jaringan berbeda dengan menggunakan perintah Ping.

```
Router#conf term
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#access-list 20 permit 192.168.120.4 0.0.0.0
Router(config)#^Z
Router#
%SYS-5-CONFIG_I: Configured from console by console

Router#conf term
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#Interface FastEthernet0/1
Router(config-if)#ip access-group 20 out
Router(config-if)#^Z
Router#
%SYS-5-CONFIG_I: Configured from console by console
```

20. Lakukan tes koneksi dari PC3 yang berada pada jaringan 192.168.120.0 ke PC1 dan PC2 yang ada pada jaringan 192.168.110.0

ping dari PC3 ke PC1

```
C:\>ping 192.168.110.3

Pinging 192.168.110.3 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 192.168.110.3:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
```

ping dari PC3 ke PC2

```
C:\>ping 192.168.110.4

Pinging 192.168.110.4 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 192.168.110.4:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
```

21. Lakukan tes koneksi dari PC4 yang berada pada jaringan 192.168.120.0 ke PC1 dan PC2 yang berada pada jaringan 192.168.110.0

ping dari PC4 ke PC1

```
C:\>ping 192.168.110.3

Pinging 192.168.110.3 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 192.168.110.3:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
```

ping dari PC4 ke PC2

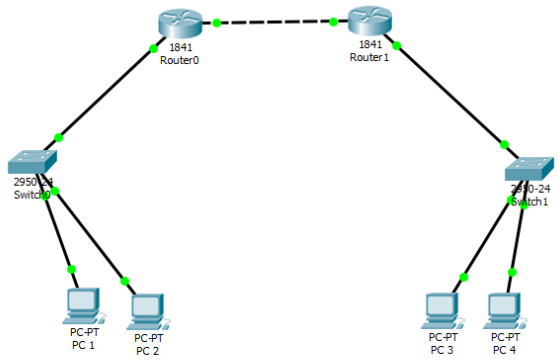
```
C:\>ping 192.168.110.4

Pinging 192.168.110.4 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 192.168.110.4:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
```

KEGIATAN 2.



Router1

Physical Config CLI Attributes

IOS Command Line Interface

```
Router#
%SYS-5-CONFIG_I: Configured from console by console

Router#conf term
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#int fa0/1
Router(config-if)#ip access-group 20 out
Router(config-if)#^Z
Router#
%SYS-5-CONFIG_I: Configured from console by console

Router#conf term
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#access-list 100 permit tcp 192.168.120.0 0.0.0.255 192.168.110.3
0.0.0.0 eq any

^
% Invalid input detected at '^' marker.

Router(config)#access-list 100 permit tcp 192.168.120.0 0.0.0.255 192.168.110.3
0.0.0.0 eq telnet
Router(config)#int fa0/1
Router(config-if)#ip access-group 100 in
Router(config-if)#exit
Router(config)#
```

Ctrl+F6 to exit CLI focus

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