Nama : Ikhwan Fahmi T

NIM : L200170174

Kelas : D

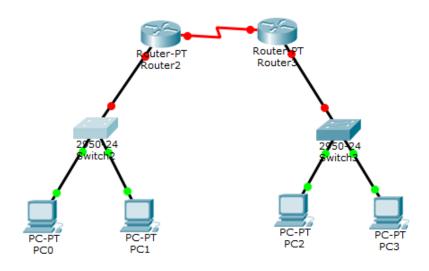
Modul:8

Praktikum

1. Desain

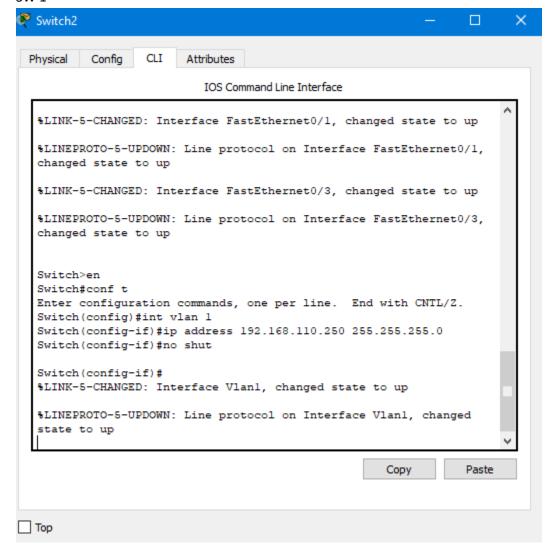
2. Identitas



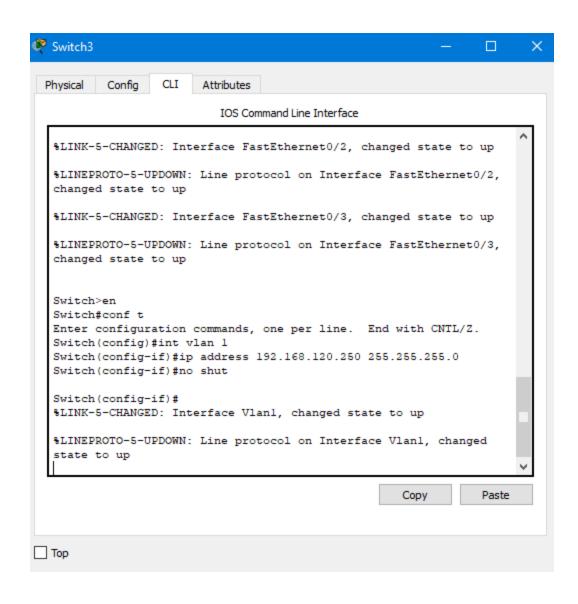


3. Konfigurasi

SW 1

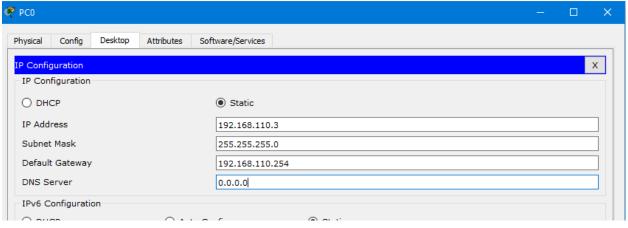


SW 2

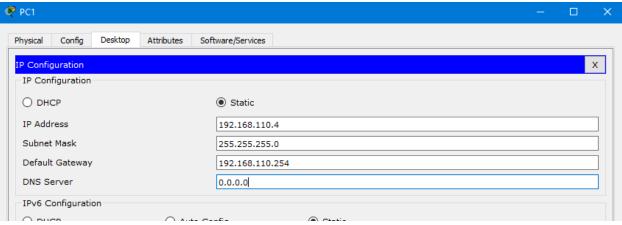


4. Konfigurasi PC 1 − 4

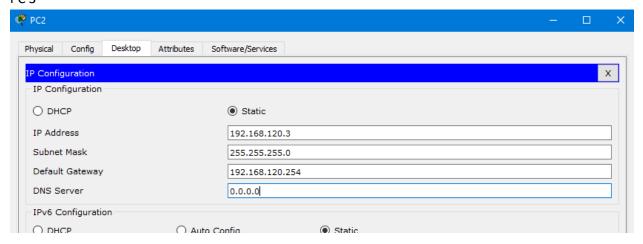
PC 1



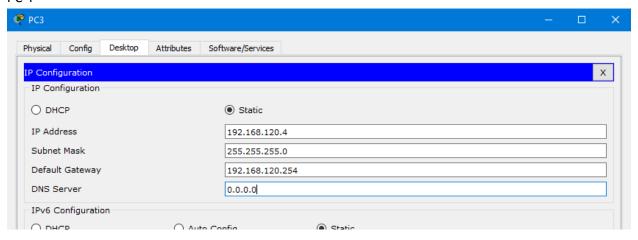
PC 2



PC 3



PC 4



5. Routing pada jaringan

Router 1

```
Router#en
Router#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config) #int FastEthernet0/0
Router(config-if) #no shut
Router(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
Router(config-if) #ip address 192.168.10.1 255.255.255.0
Router(config-if)#ex
Router(config) #int FastEthernet1/0
Router(config-if) #no shut
Router(config-if)#
%LINK-5-CHANGED: Interface FastEthernet1/0, changed state to up
Router(config-if) #ip address 192.168.110.254 255.255.255.0
Router(config-if)#ex
Router(config)#ex
Router#
%SYS-5-CONFIG_I: Configured from console by console
Router>en
Router#conf t
Enter configuration commands, one per line. End with CNTL/Z.
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
```

Router 2

```
Router>en
Router#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#
Router(config)#interface FastEthernet0/0
Router(config-if) #no shut
Router(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
Router(config-if)#ip address 192.168.10.2 255.255.255.0
Router(config-if)#ex
Router(config) #interface FastEthernet0/0
Router(config-if)#exit
Router(config) #interface FastEthernet0/0
Router(config-if)#
Router(config-if)#exit
Router(config) #interface FastEthernet1/0
Router(config-if) #no shut
Router(config-if)#
%LINK-5-CHANGED: Interface FastEthernet1/0, changed state to up
Router(config-if) #ex
Router(config) #router rip
Router(config-router) #network 192.168.120.0
Router(config-router) #network 192.168.10.0
Router(config-router) #^Z
Router#
%SYS-5-CONFIG_I: Configured from console by console
```

6. Cek table routing

Router 1

```
Routerl#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
    192.168.10.0/24 is directly connected, FastEthernet0/1
     192.168.110.0/24 is directly connected, FastEthernet0/0
     192.168.120.0/24 [120/1] via 192.168.10.2, 00:00:17,
FastEthernet0/1
Router1#
```

Router 2

```
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
     192.168.110.0/24 is directly connected, FastEthernet0/0
Router#
```

7. Ping PC 1 ke PC 4

```
Packet Tracer PC Command Line 1.0
C:\>ping 192.168.120.4

Pinging 192.168.120.4 with 32 bytes of data:

Reply from 192.168.120.4: bytes=32 time=84ms TTL=128

Reply from 192.168.120.4: bytes=32 time=2ms TTL=128

Reply from 192.168.120.4: bytes=32 time=2ms TTL=128

Reply from 192.168.120.4: bytes=32 time=1ms TTL=128

Ping statistics for 192.168.120.4:

Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),

Approximate round trip times in milli-seconds:

Minimum = 1ms, Maximum = 84ms, Average = 22ms

C:\>
```

8. Access list pada router

```
Router#conf t
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
```

9. Access list ke interface pada router

```
Router#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#int fa 0/1
%Invalid interface type and number
Router(config)#int fa 1/0
Router(config-if)#ip access-group 100 in
Router(config-if)#^Z
Router#
%SYS-5-CONFIG_I: Configured from console by console

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

10. Ping PC 3 dan PC 1

```
C:\>ping 192.168.110.3

Pinging 192.168.110.3 with 32 bytes of data:

Reply from 192.168.110.3: bytes=32 time=3ms TTL=128
Reply from 192.168.110.3: bytes=32 time=2ms TTL=128
Reply from 192.168.110.3: bytes=32 time=15ms TTL=128
Reply from 192.168.110.3: bytes=32 time=1ms TTL=128

Ping statistics for 192.168.110.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 1ms, Maximum = 15ms, Average = 5ms
C:\>
```

Ping PC 3 dan PC 1

```
C:\>ping 192.168.110.3

Pinging 192.168.110.3 with 32 bytes of data:

Reply from 192.168.110.3: bytes=32 time=lms TTL=128
Reply from 192.168.110.3: bytes=32 time<lms TTL=128
Reply from 192.168.110.3: bytes=32 time<lms TTL=128
Reply from 192.168.110.3: bytes=32 time=l3ms TTL=128

Ping statistics for 192.168.110.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 13ms, Average = 3ms</pre>
C:\>
```

11. Ping PC 4 dan PC 1

```
C:\>ping 192.168.110.3

Pinging 192.168.110.3 with 32 bytes of data:

Reply from 192.168.110.3: bytes=32 time=lms TTL=128
Reply from 192.168.110.3: bytes=32 time<lms TTL=128
Reply from 192.168.110.3: bytes=32 time<lms TTL=128
Reply from 192.168.110.3: bytes=32 time=13ms TTL=128
Ping statistics for 192.168.110.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 13ms, Average = 3ms</pre>
```

Ping PC 4 dan PC 2

```
C:\>ping 192.168.110.4

Pinging 192.168.110.4 with 32 bytes of data:

Reply from 192.168.110.4: bytes=32 time<1ms TTL=128

Reply from 192.168.110.4: bytes=32 time=3ms TTL=128

Reply from 192.168.110.4: bytes=32 time<1ms TTL=128

Reply from 192.168.110.4: bytes=32 time=3ms TTL=128

Ping statistics for 192.168.110.4:

Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),

Approximate round trip times in milli-seconds:

Minimum = 0ms, Maximum = 3ms, Average = 1ms</pre>
```

Kegiatan 2

1. Konfigurasi access-list

```
Router | Router | 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

% Incomplete command.

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) | #^Z

Router | Rout
```

2. Access-list ke interface pada router

```
Router#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#int fa 0/1
%Invalid interface type and number
Router(config)#int fa 1/0
Router(config-if)#ip access-group 100 in
Router(config-if)#^Z
Router#
%SYS-5-CONFIG_I: Configured from console by console
```