MODUL 7
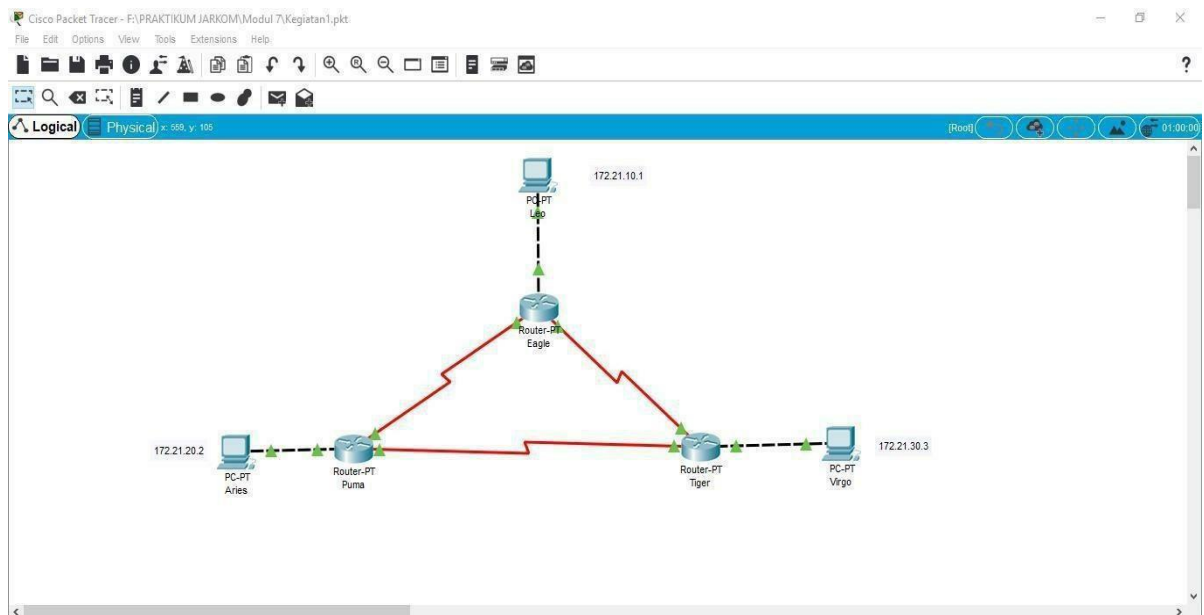
Nama   : Hada Hidayat
NIM   : L200170100
Kelas   : C

1. *Konfigurasi masing masing interface pada tiap Router*

Physical   Config   CLI   Attributes

```
        --- System Configuration Dialog ---

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


Press RETURN to get started!



Router>en
Router#config
Configuring from terminal, memory, or network [terminal]?
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#int fa 0/0
Router(config-if)#ip address 172.21.20.20 255.255.255.0
Router(config-if)#no shutdown

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)#int se 2/0
Router(config-if)#ip address 172.21.1.2 255.255.255.0
Router(config-if)#no shutdown

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

Router(config-if)#int se 3/0
Router(config-if)#clo
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/0, changed state to
Router(config-if)#int se 3/0
Router(config-if)#clock rate 2000000
Router(config-if)#ip address 172.21.3.2 255.255.255.0
Router(config-if)#no shutdown

%LINK-5-CHANGED: Interface Serial3/0, changed state to down
Router(config-if)#
```

Ctrl+F6 to exit CLI focus

Physical   Config   CLI   Attributes

```
Press RETURN to get started!


Router>en
Router#conf
Configuring from terminal, memory, or network [terminal]?
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#int fa 0/0
Router(config-if)#ip address 172.21.30.30 255.255.255.0
Router(config-if)#no shutdown

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)#int se 3/0
Router(config-if)#ip address 172.21.3.3 255.255.255.0
Router(config-if)#no shutdown

Router(config-if)#
%LINK-5-CHANGED: Interface Serial3/0, changed state to up

Router(config-if)#ip address 172.21.3.3 255.255.255.0
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial3/0, changed state to up

Router(config-if)#int se 2/0
Router(config-if)#clock rate 2000000
Router(config-if)#ip address 172.21.2.3 255.255.255.0
Router(config-if)#no shutdown

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

Router(config-if)#
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/0, changed state to up

Router(config-if)#
```

Ctrl+F6 to exit CLI focus

2. Konfigurasi ip PC

Leo

Physical | Config | Desktop | Programming | Attributes

- ○ DHCP
- ● Static

IP Address	172.21.10.1
Subnet Mask	255.255.255.0
Default Gateway	172.21.10.10
DNS Server	0.0.0.0

IPv6 Configuration

- ○ DHCP
- ○ Auto Config
- ● Static

IPv6 Address	/
Link Local Address	FE80::207:ECFF:FE5B:7596
IPv6 Gateway	
IPv6 DNS Server	

802.1X

- ☐ Use 802.1X Security

Authentication	MD5
Username	
Password	

☐ Top

Aries

Physical | Config | Desktop | Programming | Attributes

- ○ DHCP
- ● Static

IP Address	172.21.20.2
Subnet Mask	255.255.255.0
Default Gateway	172.21.20.20
DNS Server	0.0.0.0

IPv6 Configuration

- ○ DHCP
- ○ Auto Config
- ● Static

IPv6 Address	/
Link Local Address	FE80::203:E4FF:FE08:BB97
IPv6 Gateway	
IPv6 DNS Server	

802.1X

- ☐ Use 802.1X Security

Authentication	MD5
Username	
Password	

☐ Top

3. Pengujian kesesuain konfigurasi

Aries — Command Prompt

```
Packet Tracer PC Command Line 1.0
C:\>ping 172.21.1.2

Pinging 172.21.1.2 with 32 bytes of data:

Reply from 172.21.1.2: bytes=32 time<1ms TTL=255
Reply from 172.21.1.2: bytes=32 time<1ms TTL=255
Reply from 172.21.1.2: bytes=32 time<1ms TTL=255
Reply from 172.21.1.2: bytes=32 time<1ms TTL=255

Ping statistics for 172.21.1.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>
```


Virgo — Command Prompt

```
Packet Tracer PC Command Line 1.0
C:\>ping 172.21.3.3

Pinging 172.21.3.3 with 32 bytes of data:

Reply from 172.21.3.3: bytes=32 time=1ms TTL=255
Reply from 172.21.3.3: bytes=32 time<1ms TTL=255
Reply from 172.21.3.3: bytes=32 time<1ms TTL=255
Reply from 172.21.3.3: bytes=32 time<1ms TTL=255

Ping statistics for 172.21.3.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 1ms, Average = 0ms

C:\>
```
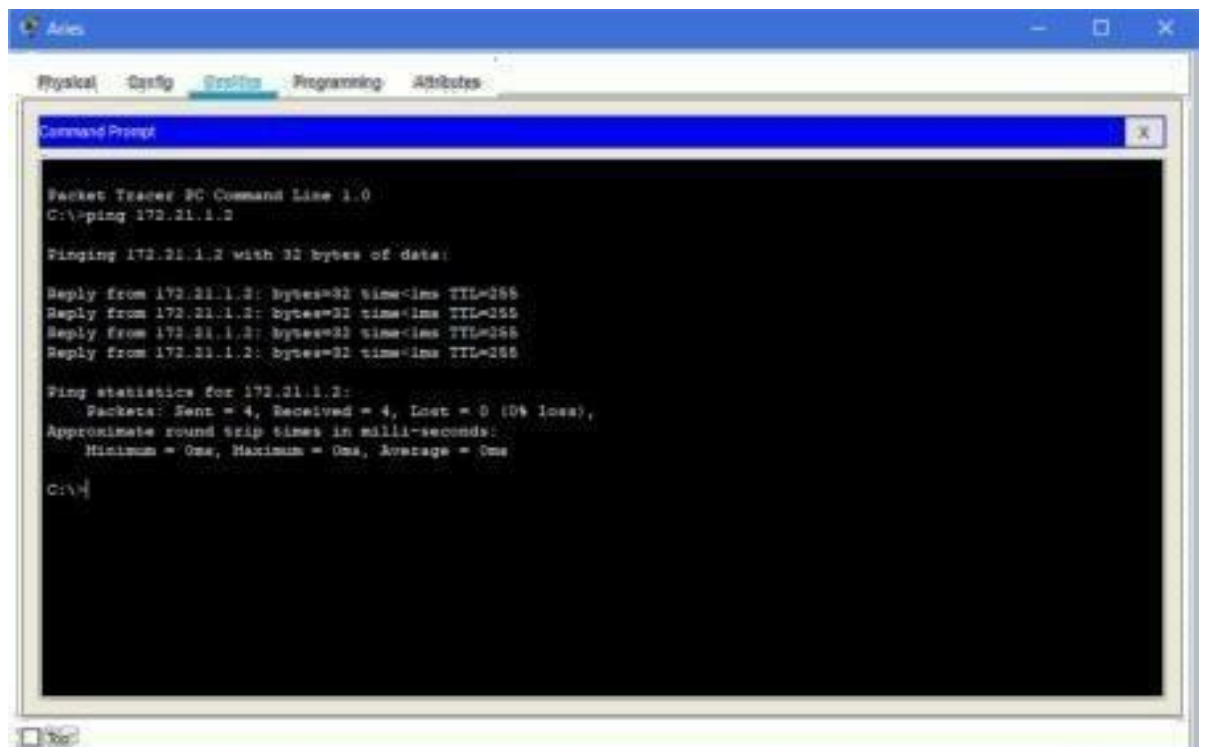
Physical   Config   CLI   Attributes

IOS Command Line Interface

```
Router>en
Router#conf
Configuring from terminal, memory, or network [terminal]?
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#ping 172.21.1.2
                      ^
% Invalid input detected at '^' marker.

Router(config)#end
Router#
%SYS-5-CONFIG_I: Configured from console by console

Router#ping 172.21.1.2

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 172.21.1.2, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 1/2/6 ms

Router#
```

Ctrl+F6 to exit CLI focus   Copy   Paste

☐ Top

```
Router#ping 172.21.2.3

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 172.21.2.3, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/1/6 ms

Router#
```

Ctrl+F6 to exit CLI focus   Copy   Paste

☐ Top

Puma — IOS Command Line Interface

Physical   Config   CLI   Attributes

IOS Command Line Interface

```
Press RETURN to get started.




Router>en
Router#ping 172.21.3.3

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 172.21.3.3, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 1/3/8 ms

Router#
```

Ctrl+F6 to exit CLI focus   Copy   Paste

☐ Top

4. Menampilkan ip route


```
Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 172.21.2.3, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/1/6 ms

Router#show 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

     172.21.0.0/24 is subnetted, 3 subnets
C       172.21.1.0 is directly connected, Serial2/0
C       172.21.2.0 is directly connected, Serial3/0
C       172.21.10.0 is directly connected, FastEthernet0/0

Router#
```

Physical   Config   CLI   Attributes

IOS Command Line Interface

```
Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 172.21.3.3, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 1/3/8 ms

Router#show 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

     172.21.0.0/24 is subnetted, 3 subnets
C       172.21.1.0 is directly connected, Serial2/0
C       172.21.3.0 is directly connected, Serial3/0
C       172.21.20.0 is directly connected, FastEthernet0/0

Router#
```

Ctrl+F6 to exit CLI focus   Copy   Paste

☐ Top

Physical   Config   CLI   Attributes

IOS Command Line Interface

```
Router>en
Router#show 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

     172.21.0.0/24 is subnetted, 3 subnets
C       172.21.2.0 is directly connected, Serial2/0
C       172.21.3.0 is directly connected, Serial3/0
C       172.21.30.0 is directly connected, FastEthernet0/0

Router#
```

Ctrl+F6 to exit CLI focus   Copy   Paste

☐ Top

5. Melakukan ping dari router eagle ke interface puma (172.21.20.20)

```
Router#ping 172.21.20.20

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 172.21.20.20, timeout is 2 seconds:
.....
Success rate is 0 percent (0/5)

Router#
```

Ctrl+F6 to exit CLI focus   Copy   Paste

☐ Top

6. *Trace PC leo ke PC aries*

```
C:\>tracert 172.21.20.2

Tracing route to 172.21.20.2 over a maximum of 30 hops:

  1   131 ms     0 ms      0 ms     172.21.10.10
  2    0 ms      *         52 ms    172.21.10.10
  3    *         0 ms      *        Request timed out.
  4    0 ms      *         13 ms    172.21.10.10
  5    *         0 ms      *        Request timed out.
  6    0 ms      *         0 ms     172.21.10.10
  7
Control-C
^C
C:\>
```

Top

7. *Trace dari PC leo ke router eagle (172.21.1.1)*

```
C:\>tracert 172.21.1.1

Tracing route to 172.21.1.1 over a maximum of 30 hops:

  1    0 ms      0 ms      0 ms     172.21.1.1

Trace complete.

C:\>
```

8. *Melakukan ip route pada masing masing router*

```
Router>en
Router#conf
Configuring from terminal, memory, or network [terminal]?
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#ip route 172.21.20.0 255.255.255.0 172.21.1.2
Router(config)#ip route 172.21.30.0 255.255.255.0 172.21.2.3
Router(config)#
```

Ctrl+F6 to exit CLI focus   Copy   Paste

Top

```
Router>en
Router#conf
Configuring from terminal, memory, or network [terminal]?
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#ip route 172.21.10.0 255.255.255.0 172.21.1.1
Router(config)#ip route 172.21.30.0 255.255.255.0 172.21.3.3
Router(config)#
```

Ctrl+F6 to exit CLI focus   Copy   Paste

Top

```
Router>en
Router#conf
Configuring from terminal, memory, or network [terminal]?
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#ip route 172.21.10.0 255.255.255.0 172.21.2.1
Router(config)#ip route 172.21.20.0 255.255.255.0 172.21.3.2
Router(config)#
```

Ctrl+F6 to exit CLI focus   Copy   Paste

☐ Top

9. *Ping PC leo ke PC aries dan tracer PC leo ke PC aries*

```
C:\>ping 172.21.20.2

Pinging 172.21.20.2 with 32 bytes of data:

Request timed out.
Reply from 172.21.20.2: bytes=32 time=130ms TTL=126
Reply from 172.21.20.2: bytes=32 time=15ms TTL=126
Reply from 172.21.20.2: bytes=32 time=1ms TTL=126

Ping statistics for 172.21.20.2:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
Approximate round trip times in milli-seconds:
    Minimum = 1ms, Maximum = 130ms, Average = 48ms

C:\>
```

☐ Top

```
C:\>tracert 172.21.20.2

Tracing route to 172.21.20.2 over a maximum of 30 hops:

  1    0 ms       0 ms       0 ms        172.21.10.10
  2    1 ms       1 ms       4 ms        172.21.1.2
  3    0 ms      13 ms       0 ms        172.21.20.2

Trace complete.

C:\>
```

☐ Top

10. *Mengubah alamat jaringan pada Leo menjadi 172.21.100.0/24*

11. *Konfigurasi ip baru pada router eagle*

```
Router#en
Router#conf
Configuring from terminal, memory, or network [terminal]?
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#int fa 0/0
Router(config-if)#ip address 172.21.100.10 255.255.255.0
Router(config-if)#no shutdown
Router(config-if)#
```

Ctrl+F6 to exit CLI focus   Copy

☐ Top

12. *Menambahkan konfigurasi ip route baru pada router puma dan tiger*

```
Router>en
Router#conf
Configuring from terminal, memory, or network [terminal]?
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#ip route 172.21.100.0 255.255.255.0 172.21.1.1
Router(config)#
```

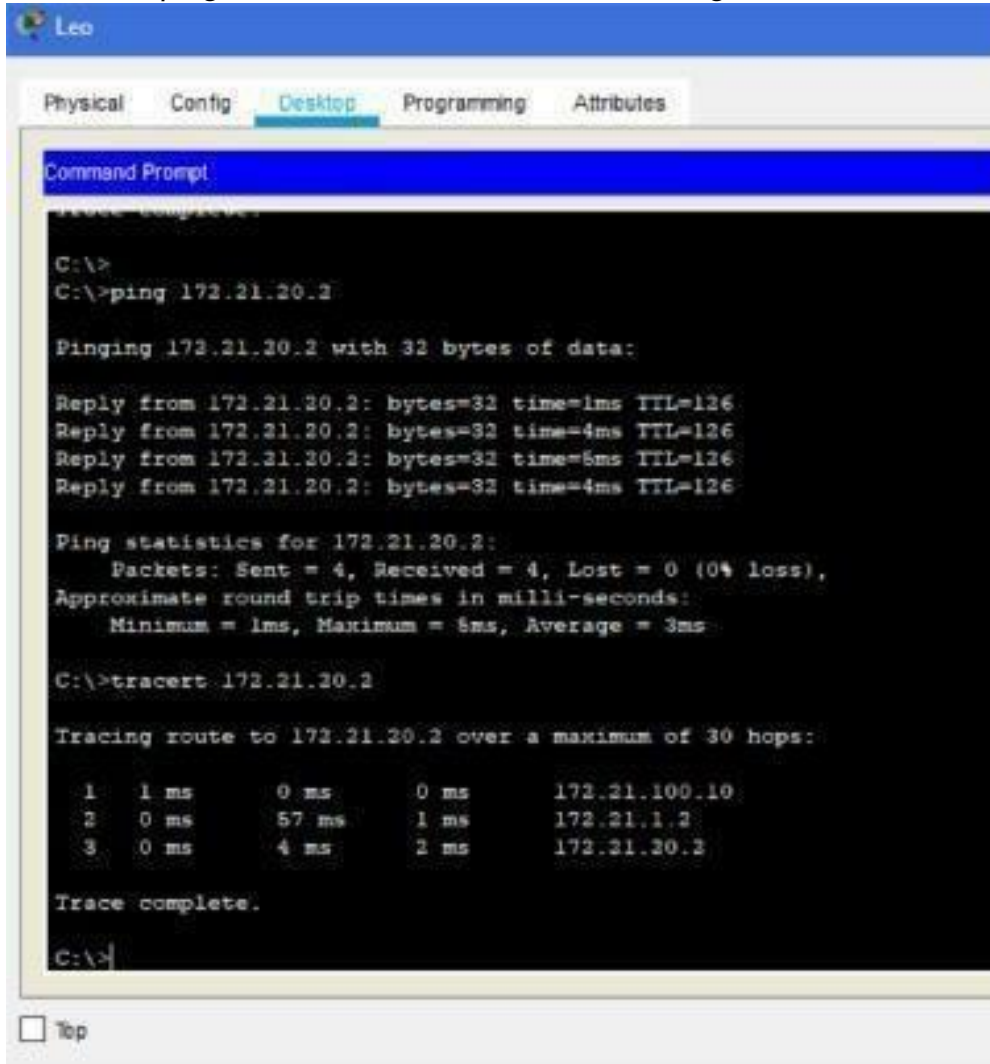Ctrl+F6 to exit CLI focus   Copy   Paste

☐ Top

```
Router>en
Router#conf
Configuring from terminal, memory, or network [terminal]?
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#ip route 172.21.100.0 255.255.255.0 172.21.2.1
Router(config)#
```

Ctrl+F6 to exit CLI focus   Copy   Paste

☐ Top

13. *Melakukan ping dan tracer dari Leo ke Aries dan Virgo*