

MODUL 7 PRAKTIKUM JARINGAN KOMPUTER

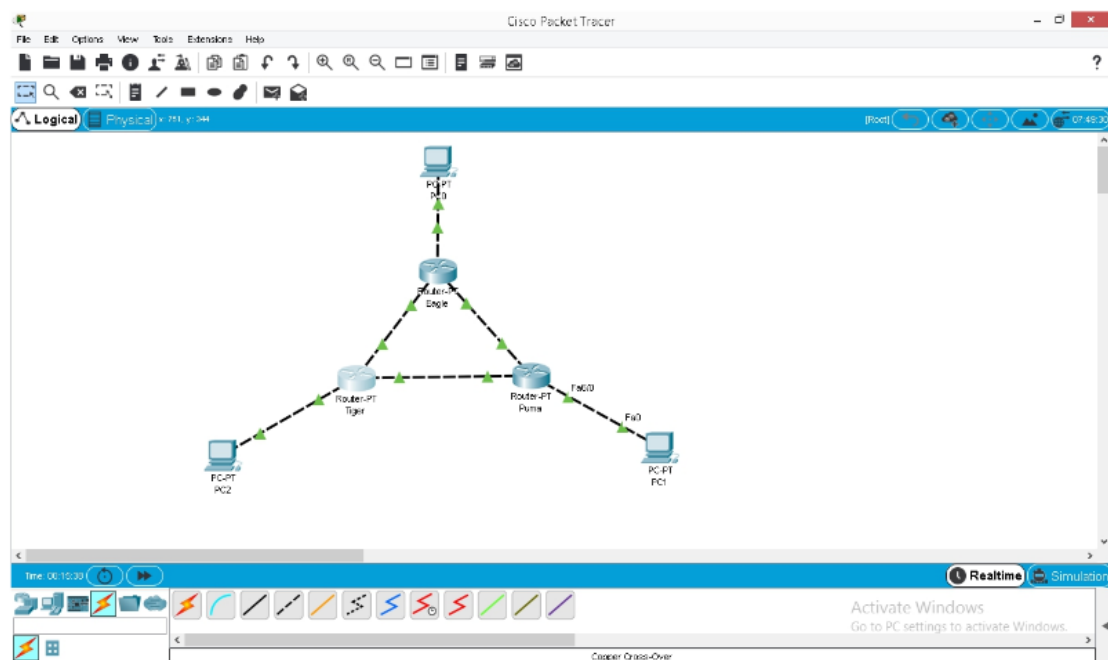
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Kelas : D

Modul : 7

Kegiatan 1. Topologi 1(Static Routing).



Konfigurasi masing-masing 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

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

LIBRA

Physical Config Desktop Programming Attributes

☐ DHCP
 ☒ Static

IP Address: 172.21.30.3

Subnet Mask: 255.255.255.0

Default Gateway: 172.21.30.30

DNS Server: 0.0.0.0

Ping PC Leo ke Router Eagle

LEO

Physical Config Desktop Programming Attributes

Command Prompt

```

Packet Tracer PC Command Line 1.0
C:\>ping 172.21.1.1

Pinging 172.21.1.1 with 32 bytes of data:

Reply from 172.21.1.1: bytes=32 time=37ms TTL=255
Reply from 172.21.1.1: bytes=32 time<1ms TTL=255
Reply from 172.21.1.1: bytes=32 time<1ms TTL=255
Reply from 172.21.1.1: bytes=32 time<1ms TTL=255

Ping statistics for 172.21.1.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 37ms, Average = 9ms

C:\>

```

Ping PC Aries ke Router Puma

```

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 = 1ms, Average = 0ms

```

Ping PC Libra ke Router Tiger

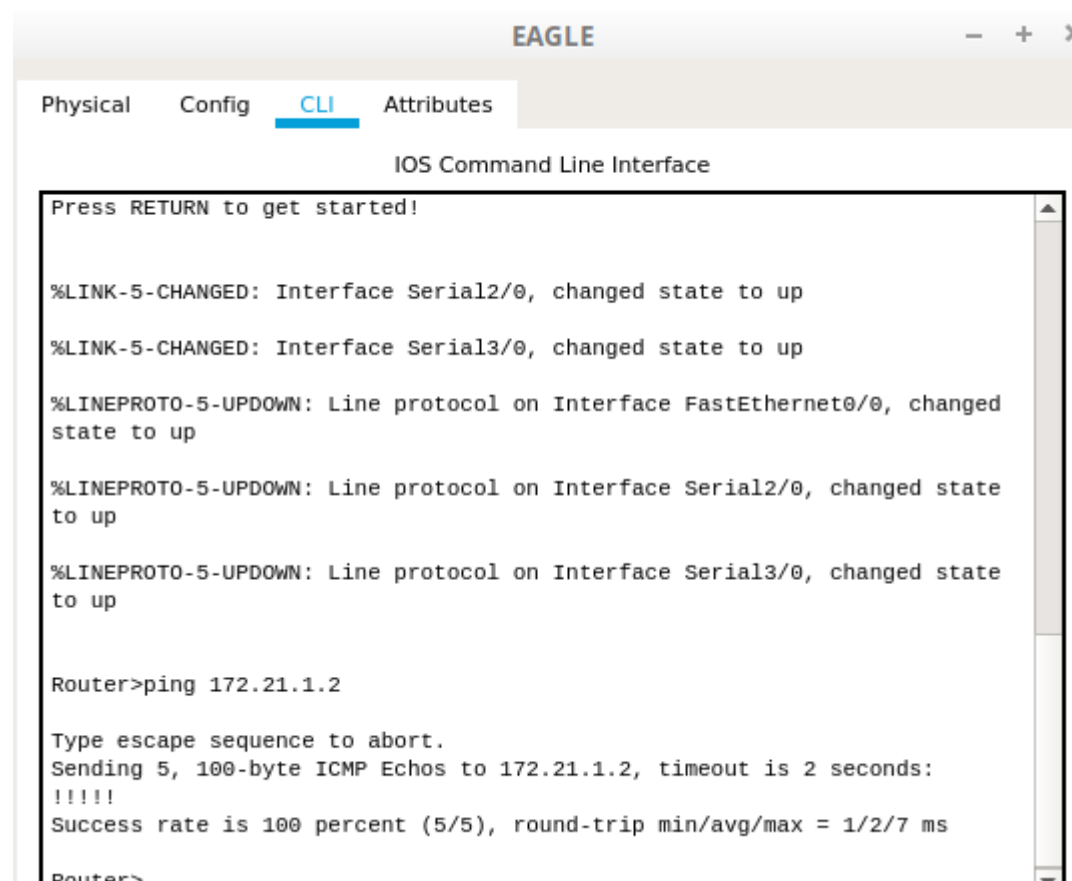
```
Pinging 172.21.3.3 with 32 bytes of data:

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:\>
```

Ping Router Eagle ke Router Puma



Ping Router Eagle ke Router Tiger

Router>

Router>ping 172.21.1.3

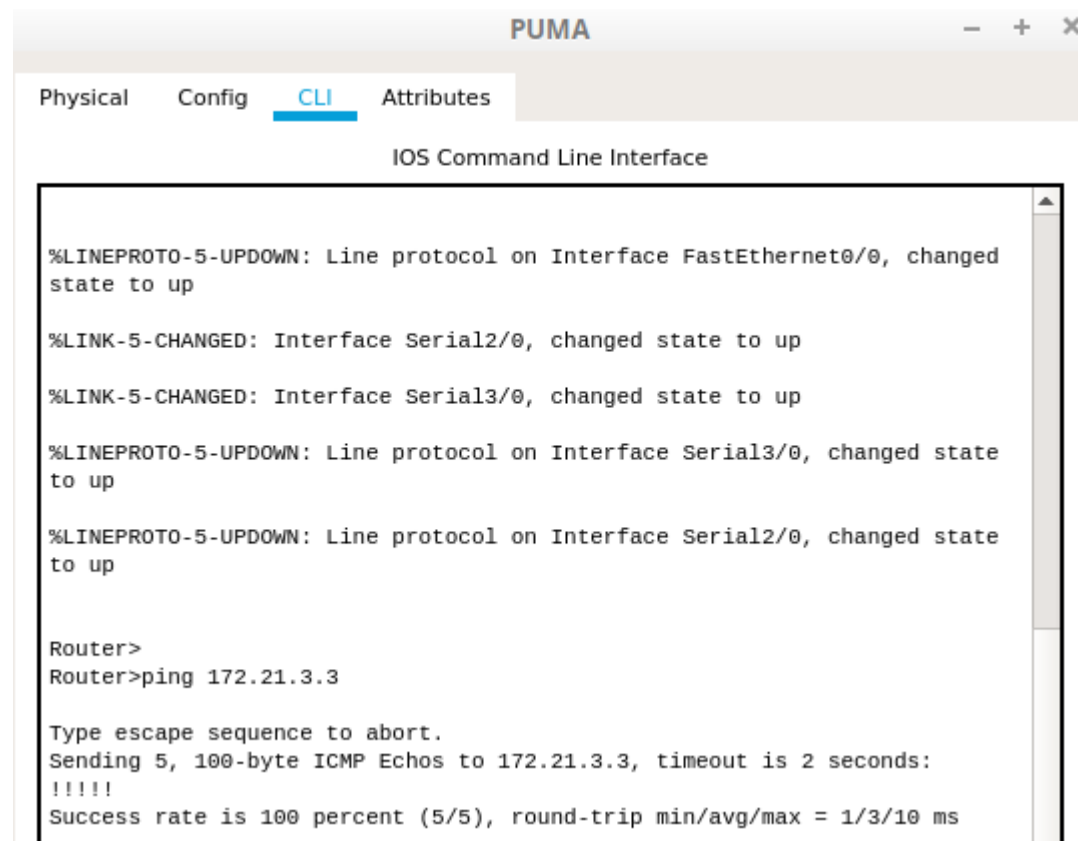
Type escape sequence to abort.

Sending 5, 100-byte ICMP Echos to 172.21.1.3, timeout is 2 seconds:

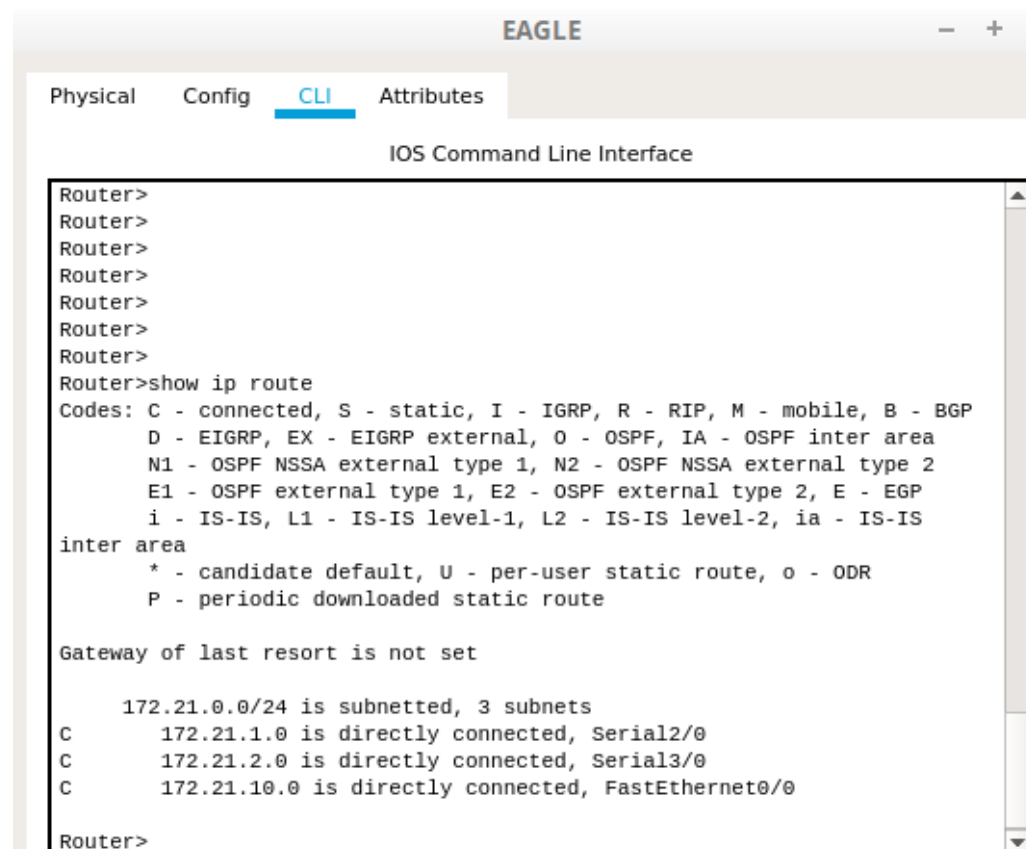
.....

Success rate is 0 percent (0/5)

Ping Router Puma ke Router Tiger



Lihat route table pada masing-masing router



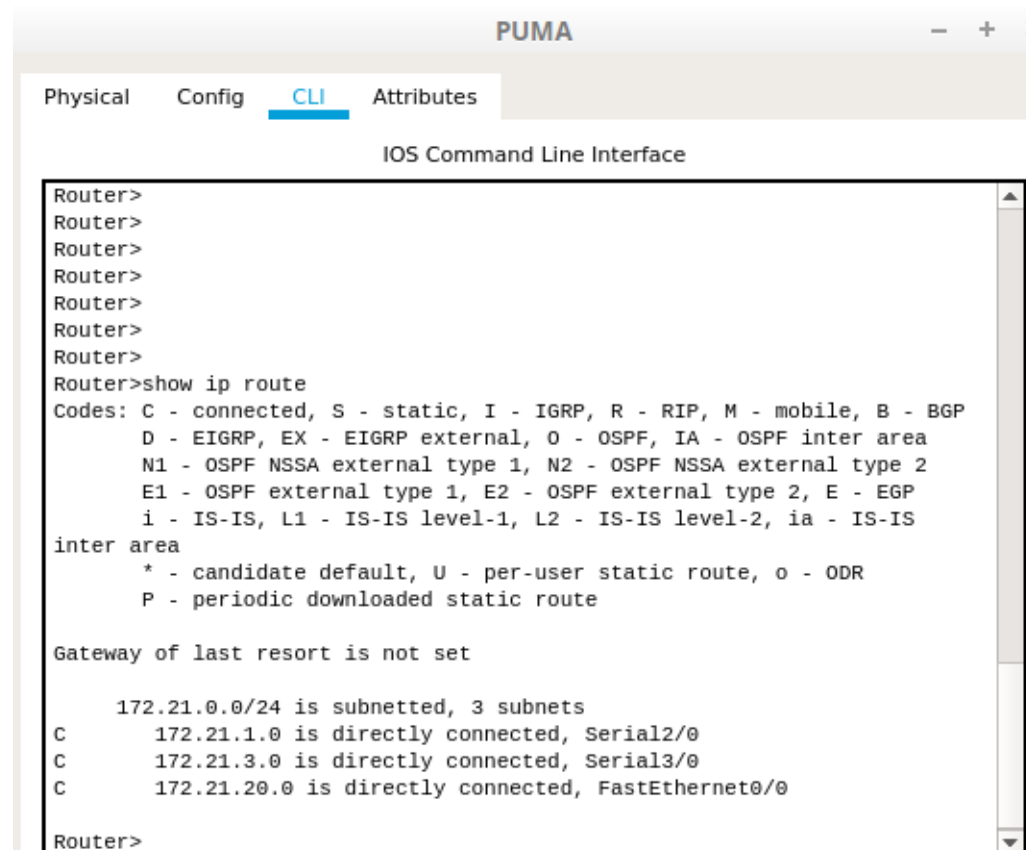
The screenshot shows the EAGLE router's CLI interface. The 'CLI' tab is selected. The command 'show ip route' has been entered, and the output is displayed. The output includes a list of codes for different routing protocols and a summary of the route table. The route table shows three connected routes: 172.21.1.0/24, 172.21.2.0/24, and 172.21.10.0/24.

```
Router>
Router>
Router>
Router>
Router>
Router>
Router>
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>
```



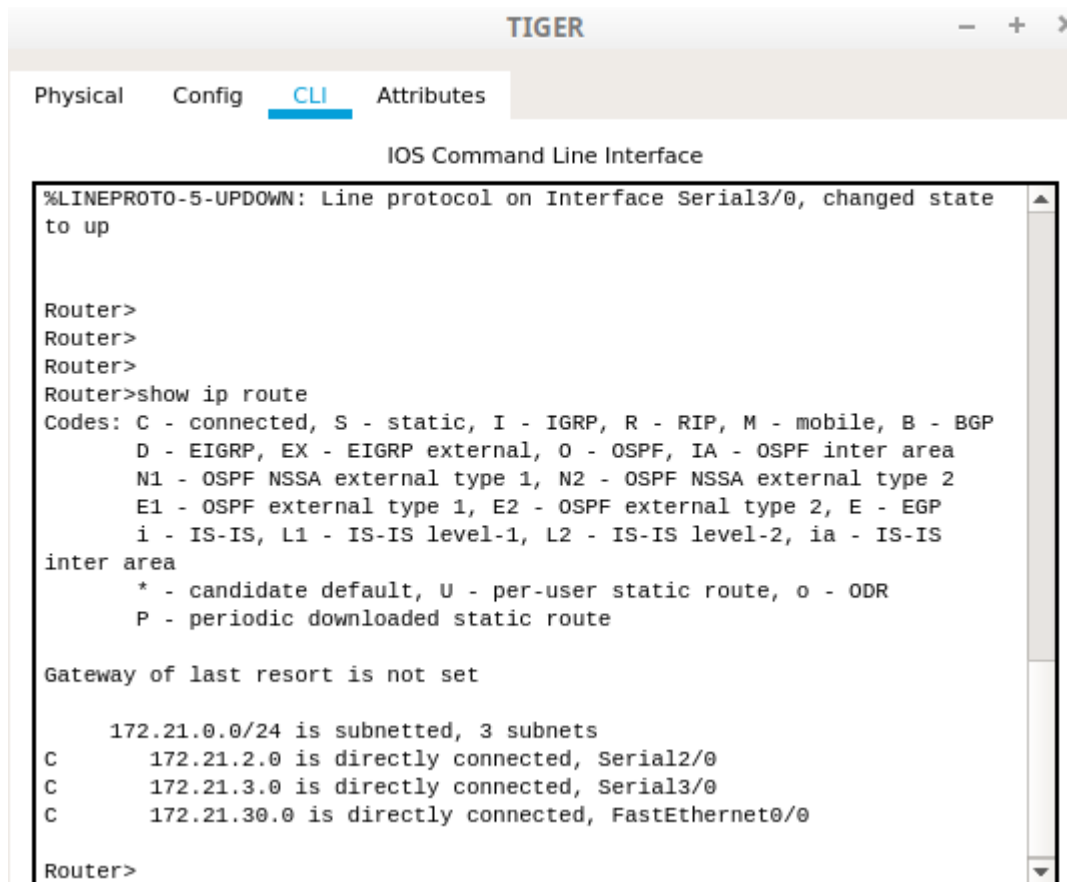
The screenshot shows the PUMA router's CLI interface. The 'CLI' tab is selected. The command 'show ip route' has been entered, and the output is displayed. The output includes a list of codes for different routing protocols and a summary of the route table. The route table shows three connected routes: 172.21.1.0/24, 172.21.3.0/24, and 172.21.20.0/24.

```
Router>
Router>
Router>
Router>
Router>
Router>
Router>
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>
```



The screenshot shows the TIGER router's CLI interface. The 'CLI' tab is selected. The output of the 'show ip route' command is displayed, showing the routing table. The output includes a message about the line protocol on Serial3/0, a list of codes for route types, and a list of connected routes.

```
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial3/0, changed state to up

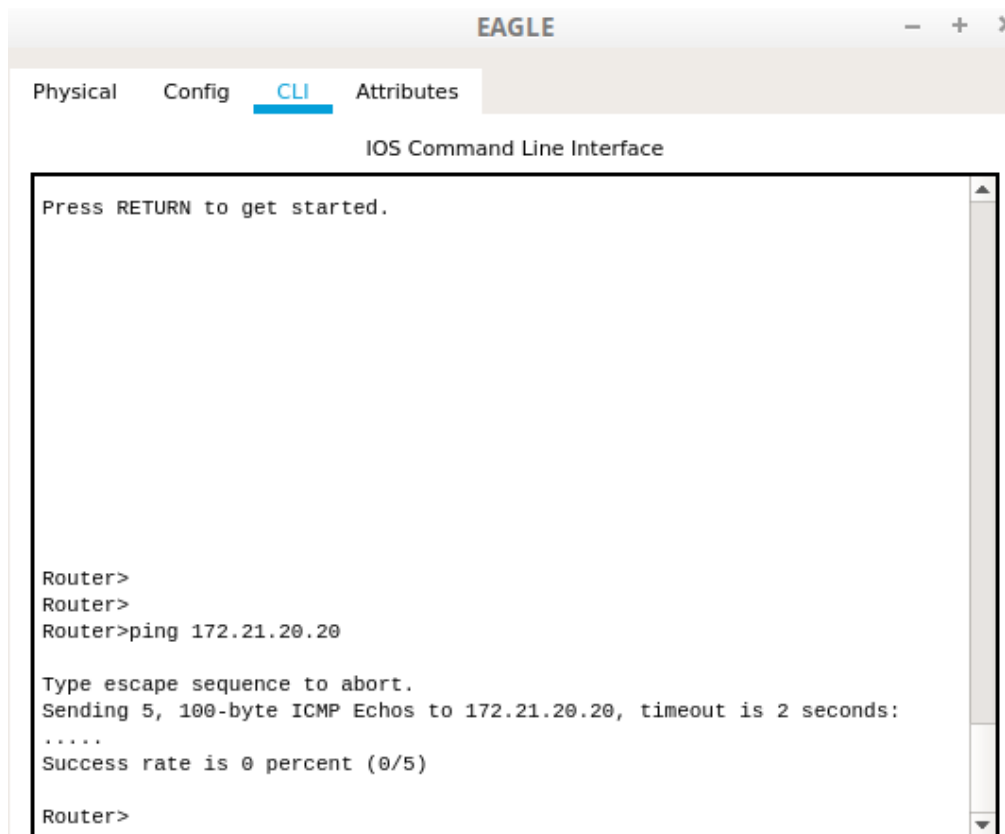
Router>
Router>
Router>
Router>show ip route
Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF 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>
```

Dari Router Eagle lakukan ping ke alamat interface e0 router Puma



The screenshot shows the EAGLE router's CLI interface. The 'CLI' tab is selected. The output of the 'ping 172.21.20.20' command is displayed, showing the success rate of the ping.

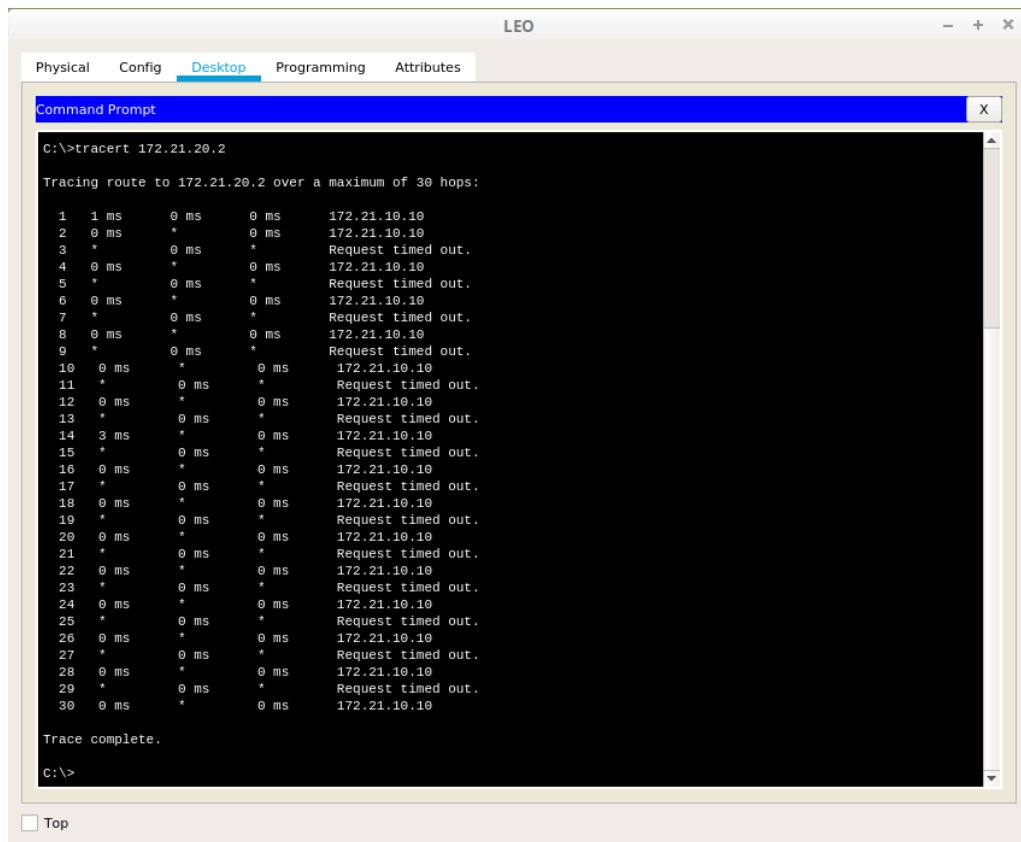
```
Press RETURN to get started.

Router>
Router>
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>
```

Dari PC Leo lakukan trace ke PC Aries



The screenshot shows a Packet Tracer window titled "LEO" with tabs for Physical, Config, Desktop, Programming, and Attributes. The Desktop tab is active, displaying a Command Prompt window. The Command Prompt shows the execution of the command `C:\>tracert 172.21.20.2`. The output displays a tracing route to 172.21.20.2 over a maximum of 30 hops. The route shows successful connections to 172.21.10.10 at hops 1, 2, 4, 6, 8, and 30, while hops 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, and 31 result in "Request timed out." The trace is complete.

```
C:\>tracert 172.21.20.2

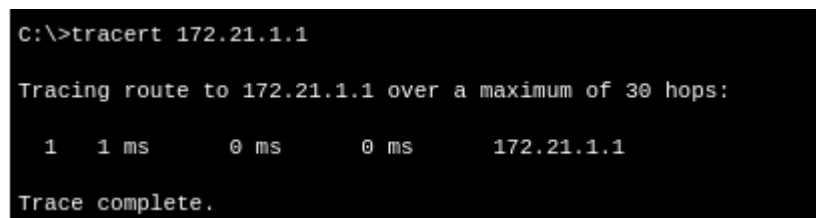
Tracing route to 172.21.20.2 over a maximum of 30 hops:

  1  1 ms    0 ms    0 ms    172.21.10.10
  2  0 ms    *        0 ms    172.21.10.10
  3  *        0 ms    *        Request timed out.
  4  0 ms    *        0 ms    172.21.10.10
  5  *        0 ms    *        Request timed out.
  6  0 ms    *        0 ms    172.21.10.10
  7  *        0 ms    *        Request timed out.
  8  0 ms    *        0 ms    172.21.10.10
  9  *        0 ms    *        Request timed out.
 10 0 ms    *        0 ms    172.21.10.10
 11 *        0 ms    *        Request timed out.
 12 0 ms    *        0 ms    172.21.10.10
 13 *        0 ms    *        Request timed out.
 14 3 ms    *        0 ms    172.21.10.10
 15 *        0 ms    *        Request timed out.
 16 0 ms    *        0 ms    172.21.10.10
 17 *        0 ms    *        Request timed out.
 18 0 ms    *        0 ms    172.21.10.10
 19 *        0 ms    *        Request timed out.
 20 0 ms    *        0 ms    172.21.10.10
 21 *        0 ms    *        Request timed out.
 22 0 ms    *        0 ms    172.21.10.10
 23 *        0 ms    *        Request timed out.
 24 0 ms    *        0 ms    172.21.10.10
 25 *        0 ms    *        Request timed out.
 26 0 ms    *        0 ms    172.21.10.10
 27 *        0 ms    *        Request timed out.
 28 0 ms    *        0 ms    172.21.10.10
 29 *        0 ms    *        Request timed out.
 30 0 ms    *        0 ms    172.21.10.10

Trace complete.

C:\>
```

Dari PC Leo lakukan trace ke alamat interface s0 router Eagle



The screenshot shows a Command Prompt window with the command `C:\>tracert 172.21.1.1`. The output shows a successful tracing route to 172.21.1.1 over a maximum of 30 hops, with all hops (1 through 30) showing successful connections with 0 ms latency. The trace is complete.

```
C:\>tracert 172.21.1.1

Tracing route to 172.21.1.1 over a maximum of 30 hops:

  1  1 ms    0 ms    0 ms    172.21.1.1

Trace complete.
```

Pada mode user atau mode privileged, tambahkan route table pada masing-masing router untuk setiap alamat jaringan yang tidak terhubung secara langsung dengan interface router

```
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)#
```

```
Router>en
Router#conf term
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)#
```

```
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
```

Dari PC Leo lakukan ping ke PC Aries, dan lakukan pula trace dari PC Leo ke Aries

```
C:\>
C:\>ping 172.21.20.2

Pinging 172.21.20.2 with 32 bytes of data:

Reply from 172.21.20.2: bytes=32 time=67ms TTL=126
Reply from 172.21.20.2: bytes=32 time=1ms TTL=126
Reply from 172.21.20.2: bytes=32 time=3ms 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 = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 1ms, Maximum = 67ms, Average = 18ms
```

```
C:\>
C:\>tracert 172.21.20.2

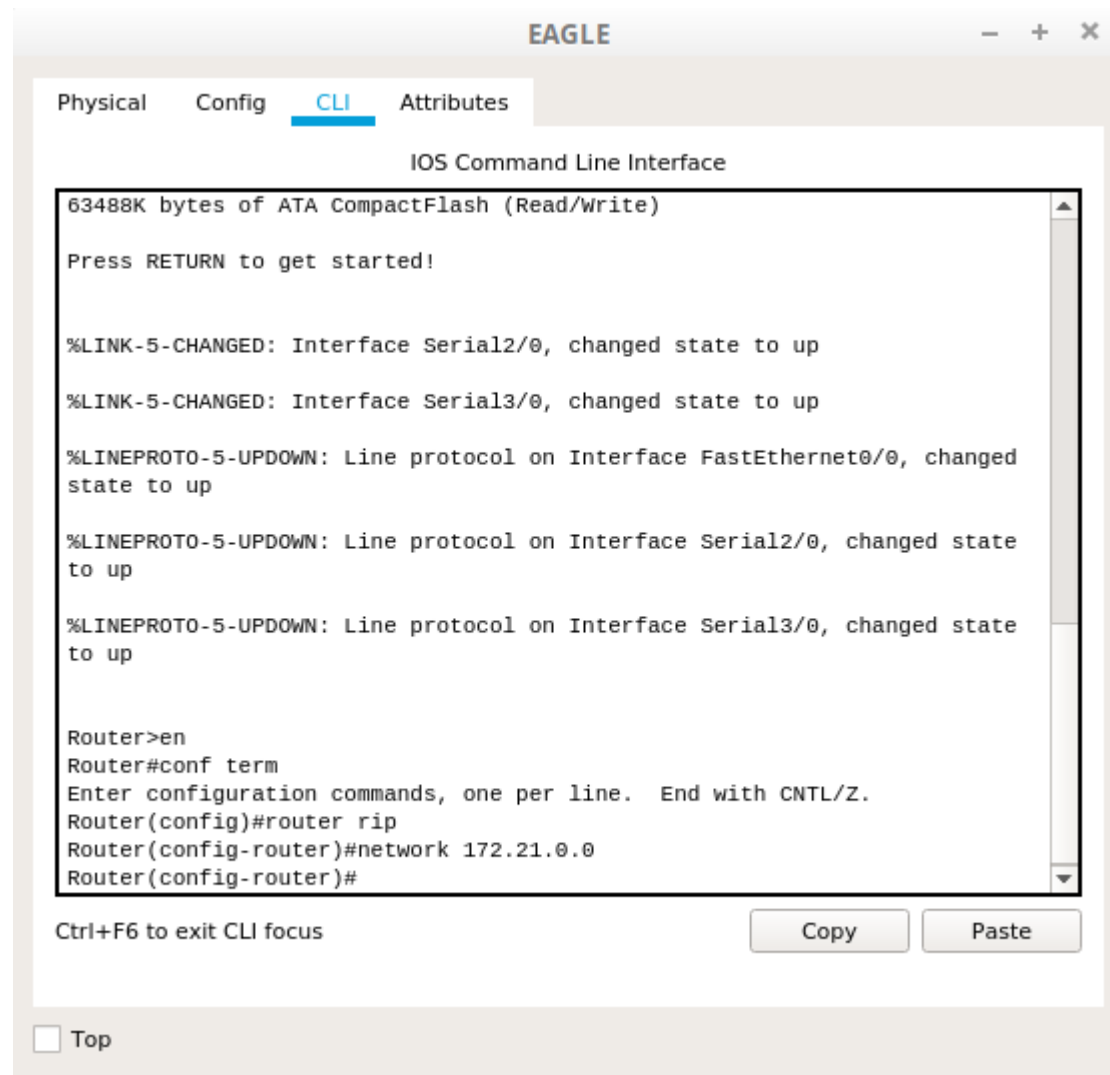
Tracing route to 172.21.20.2 over a maximum of 30 hops:

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

Trace complete.
```


Kegiatan 2. RIP (Routing Information Protocol)

Pada mode configuration, konfigurasi routing RIP pada router Eagle.



Lihat Konfigurasi routing RIP yang telah dibuat dengan perintah “**show running-config**” pada mode user. Perhatikan konfigurasi pada bagian “router rip”.

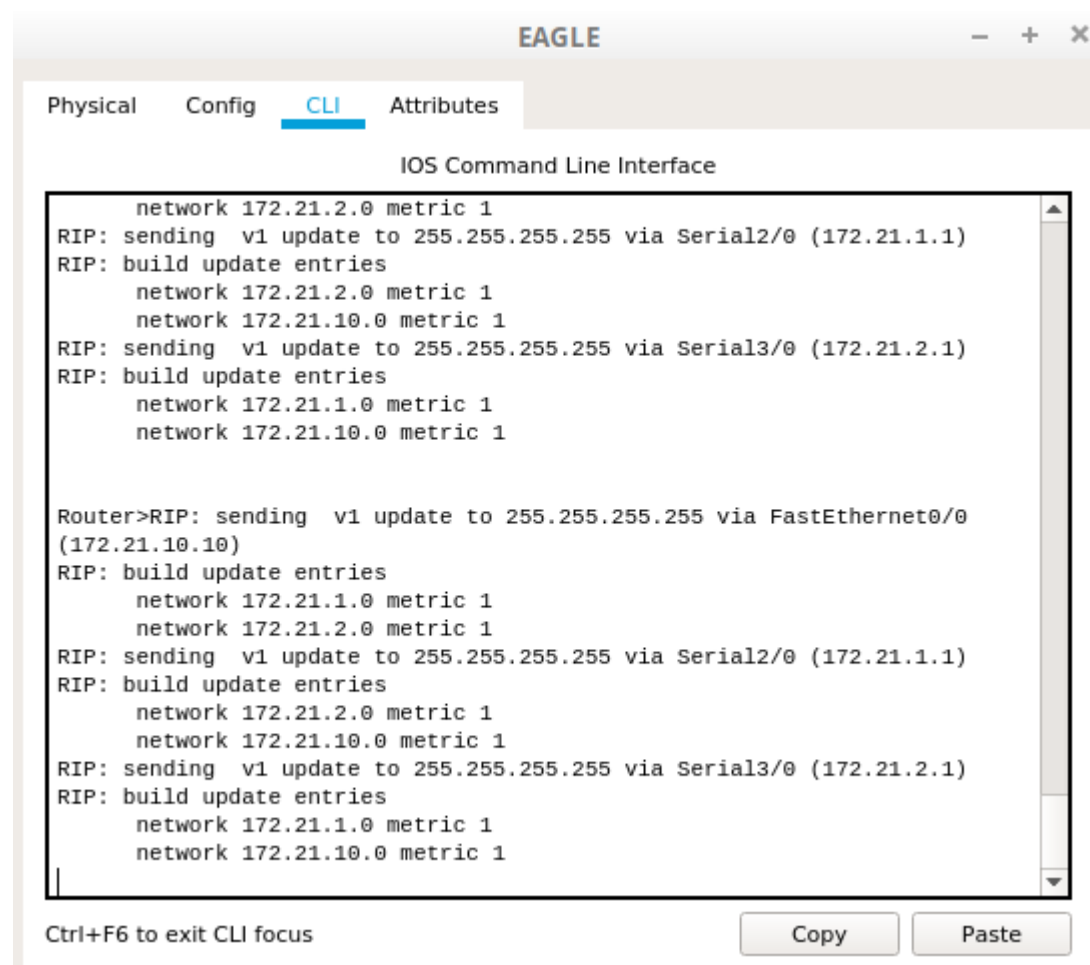
```

Router#show running-config
Building configuration...

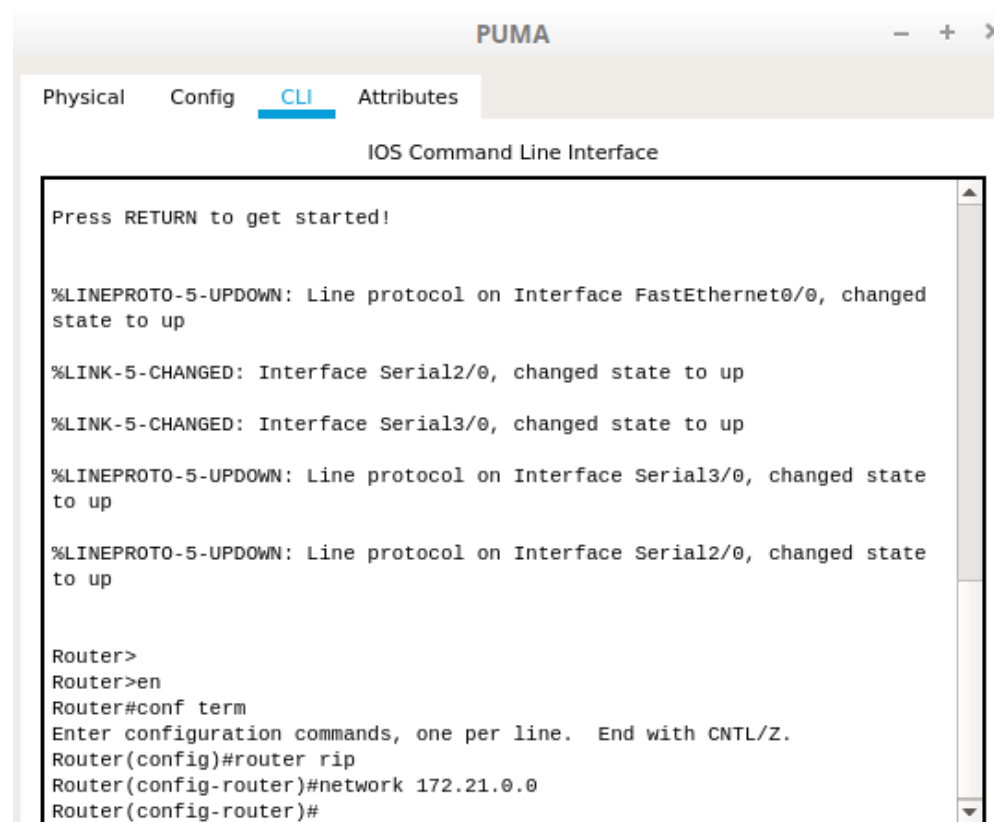
Current configuration : 777 bytes
!
version 12.2
no service timestamps log datetime msec
no service timestamps debug datetime msec
no service password-encryption
!
hostname Router
!
!
!
!
!
!
!
ip cef
no ipv6 cef
!

```

Lihat proses update routing RIP pada router eagle dengan perintah “**debug ip rip**” pada mode user. Tunggu beberapa saat untuk melihat proses yang terjadi.



Lakukan konfigurasi routing RIP pada router puma dan tiger. Perhatikan proses update routing RIP pada router eagle ketika konfigurasi router puma dan tiger dilakukan.



The screenshot shows the PUMA router's CLI interface. The window title is "PUMA". The tabs are "Physical", "Config", "CLI" (selected), and "Attributes". The text "IOS Command Line Interface" is displayed. The output shows several status messages: "%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up", "%LINK-5-CHANGED: Interface Serial2/0, changed state to up", "%LINK-5-CHANGED: Interface Serial3/0, changed state to up", "%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial3/0, changed state to up", and "%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/0, changed state to up". The command prompt is "Router>". The user enters "en" to enter enable mode, then "conf term" to enter configuration mode. The prompt changes to "Router(config)#". The user enters "router rip", then "network 172.21.0.0", and finally "#".

```
PUMA
Physical Config CLI Attributes
IOS Command Line Interface

Press RETURN to get started!

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed
state to up

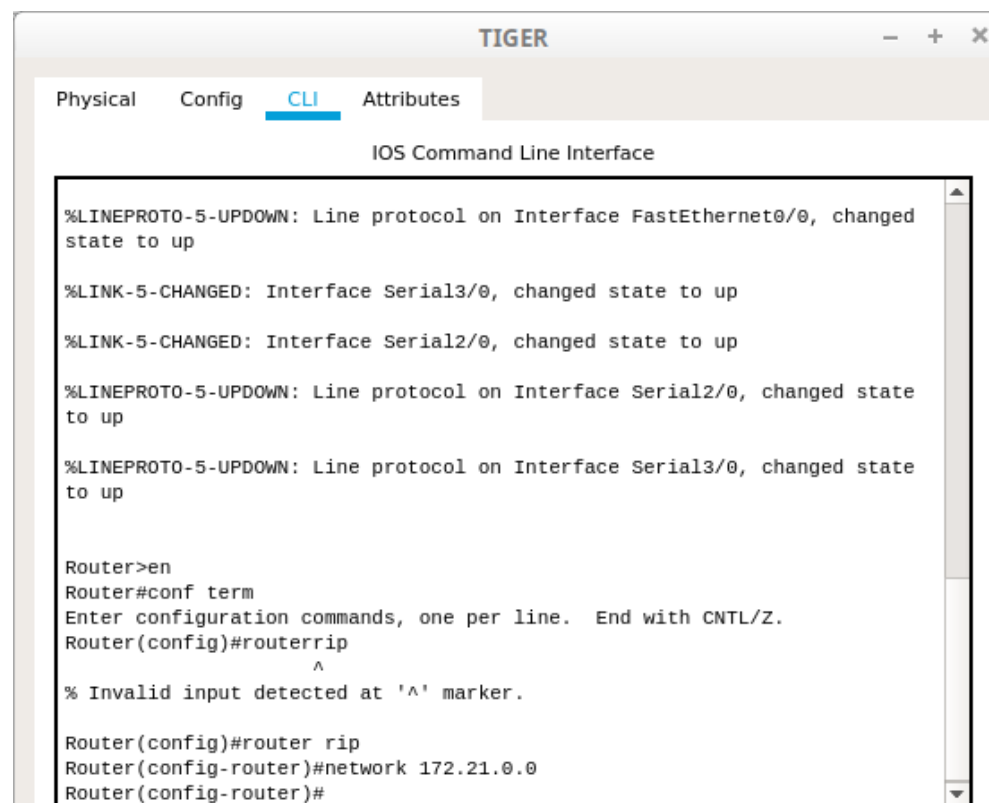
%LINK-5-CHANGED: Interface Serial2/0, changed state to up

%LINK-5-CHANGED: Interface Serial3/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial3/0, changed state
to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/0, changed state
to up

Router>
Router>en
Router#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#router rip
Router(config-router)#network 172.21.0.0
Router(config-router)#
```



The screenshot shows the TIGER router's CLI interface. The window title is "TIGER". The tabs are "Physical", "Config", "CLI" (selected), and "Attributes". The text "IOS Command Line Interface" is displayed. The output shows several status messages: "%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up", "%LINK-5-CHANGED: Interface Serial3/0, changed state to up", "%LINK-5-CHANGED: Interface Serial2/0, changed state to up", "%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/0, changed state to up", and "%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial3/0, changed state to up". The command prompt is "Router>". The user enters "en" to enter enable mode, then "conf term" to enter configuration mode. The prompt changes to "Router(config)#". The user enters "router rip", then "network 172.21.0.0", and finally "#".

```
TIGER
Physical Config CLI Attributes
IOS Command Line Interface

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed
state to up

%LINK-5-CHANGED: Interface Serial3/0, changed state to up

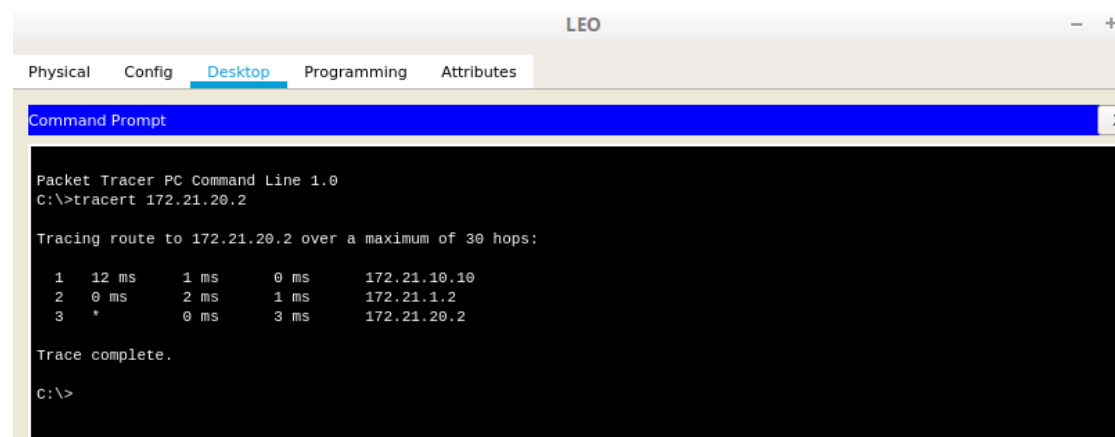
%LINK-5-CHANGED: Interface Serial2/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/0, changed state
to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial3/0, changed state
to up

Router>en
Router#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#router rip
Router(config-router)#network 172.21.0.0
Router(config-router)#
```

Dari PC Leo lakukan trace ke PC Aries



```
LEO
Physical  Config  Desktop  Programming  Attributes
Command Prompt

Packet Tracer PC Command Line 1.0
C:\>tracert 172.21.20.2

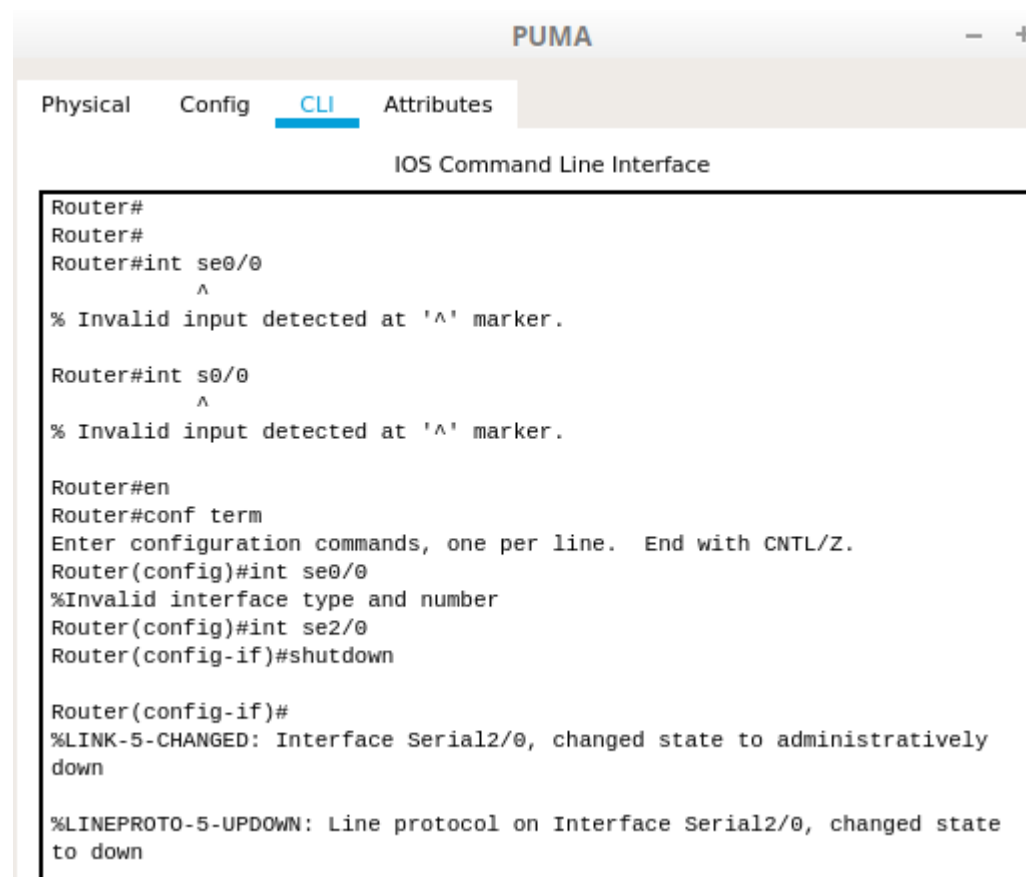
Tracing route to 172.21.20.2 over a maximum of 30 hops:

  1  12 ms   1 ms   0 ms   172.21.10.10
  2   0 ms   2 ms   1 ms   172.21.1.2
  3   *      0 ms   3 ms   172.21.20.2

Trace complete.

C:\>
```

Buat hubungan antara router eagle dan puma terputus dan perhatikan proses update routing RIP yang terjadi.



```
PUMA
Physical  Config  CLI  Attributes

IOS Command Line Interface

Router#
Router#
Router#int se0/0
      ^
% Invalid input detected at '^' marker.

Router#int s0/0
      ^
% Invalid input detected at '^' marker.

Router#en
Router#conf term
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#int se0/0
%Invalid interface type and number
Router(config)#int se2/0
Router(config-if)#shutdown

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

%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/0, changed state
to down
```

Dari PC Leo lakukan trace ke PC Aries

```
C:\>tracert 172.21.20.2

Tracing route to 172.21.20.2 over a maximum of 30 hops:

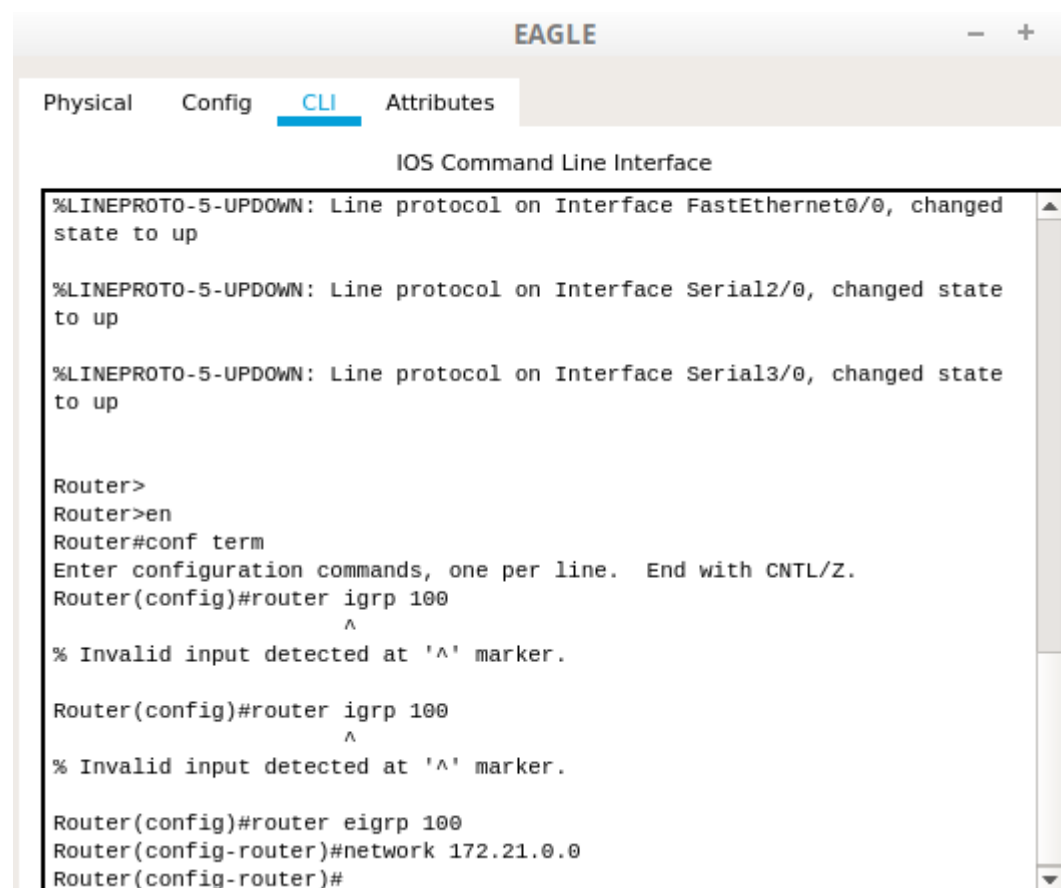
  1  1 ms    0 ms    0 ms    172.21.10.10
  2  1 ms    1 ms    1 ms    172.21.2.3
  3  1 ms    0 ms    1 ms    172.21.3.2
  4  0 ms    1 ms    1 ms    172.21.20.2

Trace complete.

C:\>
```

Kegiatan 3. IGRP (Internet Gateway Routing Protocol)

Pada mode configuration, konfigurasi routing RIP pada router Eagle



```
EAGLE

Physical  Config  CLI  Attributes

IOS Command Line Interface

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed
state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/0, changed state
to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial3/0, changed state
to up

Router>
Router>en
Router#conf term
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#router igrp 100
      ^
% Invalid input detected at '^' marker.

Router(config)#router igrp 100
      ^
% Invalid input detected at '^' marker.

Router(config)#router eigrp 100
Router(config-router)#network 172.21.0.0
Router(config-router)#
```

Lihat konfigurasi routing IGRP yang telah dibuat dengan perintah “**show running-config**” pada mode user. Perhatikan konfigurasi pada bagian “router rip”

EAGLE

Physical Config CLI Attributes

IOS Command Line Interface

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

Current configuration : 810 bytes
!
version 12.2
no service timestamps log datetime msec
no service timestamps debug datetime msec
no service password-encryption
!
hostname Router
!
!
!
!
!
!
!
!
ip cef
no ipv6 cef
!
!
--More--
```

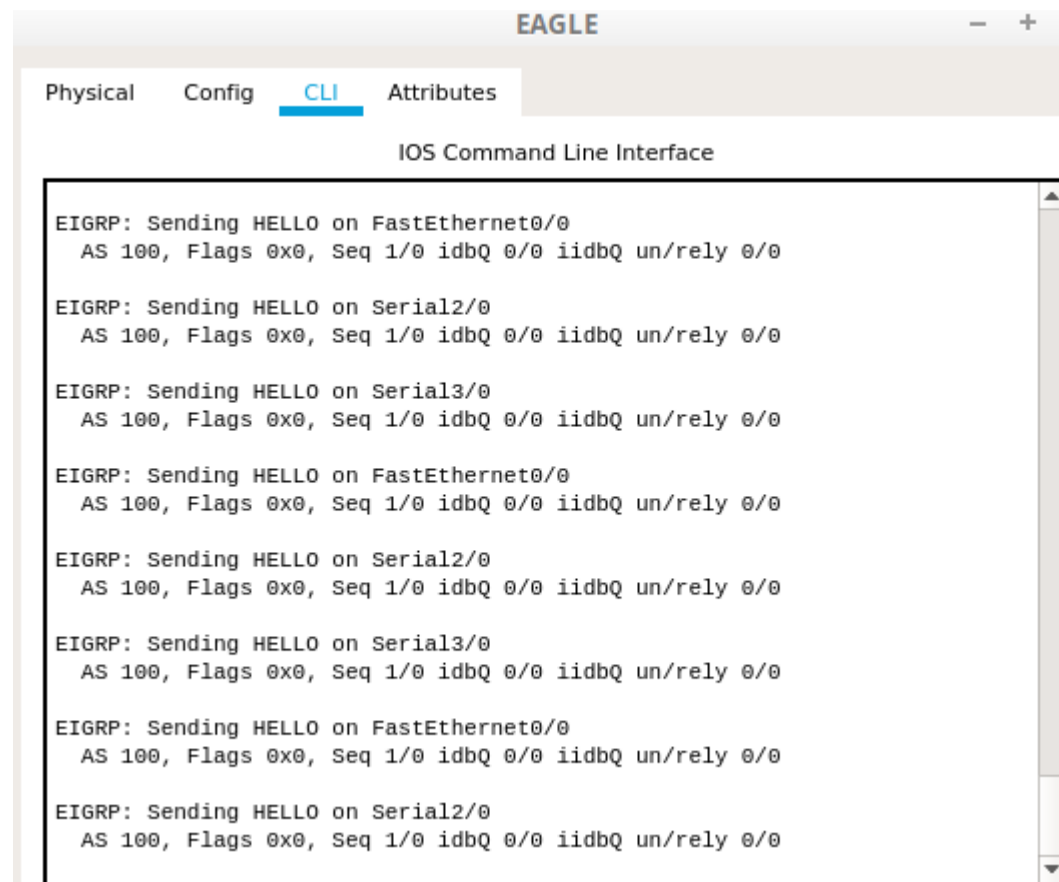
EAGLE

Physical Config CLI Attributes

IOS Command Line Interface

```
!
interface Serial3/0
 ip address 172.21.2.1 255.255.255.0
!
interface FastEthernet4/0
 no ip address
 shutdown
!
interface FastEthernet5/0
 no ip address
 shutdown
!
router eigrp 100
 network 172.21.0.0
 auto-summary
!
router rip
!
ip classless
!
ip flow-export version 9
!
!
!
!
```

Lihat proses transaksi routing IGRP pada router eagle dengan perintah **“debug ip igrp transactions”** pada mode user. Tunggu beberapa saat untuk melihat informasi transaksi routing IGRP yang terjadi.

The screenshot shows a terminal window titled 'EAGLE' with tabs for 'Physical', 'Config', 'CLI' (selected), and 'Attributes'. Below the tabs is the text 'IOS Command Line Interface'. The terminal output displays a series of EIGRP Hello messages being sent on various interfaces. Each message includes the text 'EIGRP: Sending HELLO on [interface]', 'AS 100', 'Flags 0x0', 'Seq 1/0', 'idbQ 0/0', and 'iidxQ un/rely 0/0'. The interfaces shown are FastEthernet0/0, Serial2/0, and Serial3/0. The messages are repeated for each of these three interfaces.

```
EAGLE
Physical Config CLI Attributes
IOS Command Line Interface

EIGRP: Sending HELLO on FastEthernet0/0
AS 100, Flags 0x0, Seq 1/0 idbQ 0/0 iidxQ un/rely 0/0

EIGRP: Sending HELLO on Serial2/0
AS 100, Flags 0x0, Seq 1/0 idbQ 0/0 iidxQ un/rely 0/0

EIGRP: Sending HELLO on Serial3/0
AS 100, Flags 0x0, Seq 1/0 idbQ 0/0 iidxQ un/rely 0/0

EIGRP: Sending HELLO on FastEthernet0/0
AS 100, Flags 0x0, Seq 1/0 idbQ 0/0 iidxQ un/rely 0/0

EIGRP: Sending HELLO on Serial2/0
AS 100, Flags 0x0, Seq 1/0 idbQ 0/0 iidxQ un/rely 0/0

EIGRP: Sending HELLO on Serial3/0
AS 100, Flags 0x0, Seq 1/0 idbQ 0/0 iidxQ un/rely 0/0

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AS 100, Flags 0x0, Seq 1/0 idbQ 0/0 iidxQ un/rely 0/0

EIGRP: Sending HELLO on Serial2/0
AS 100, Flags 0x0, Seq 1/0 idbQ 0/0 iidxQ un/rely 0/0
```

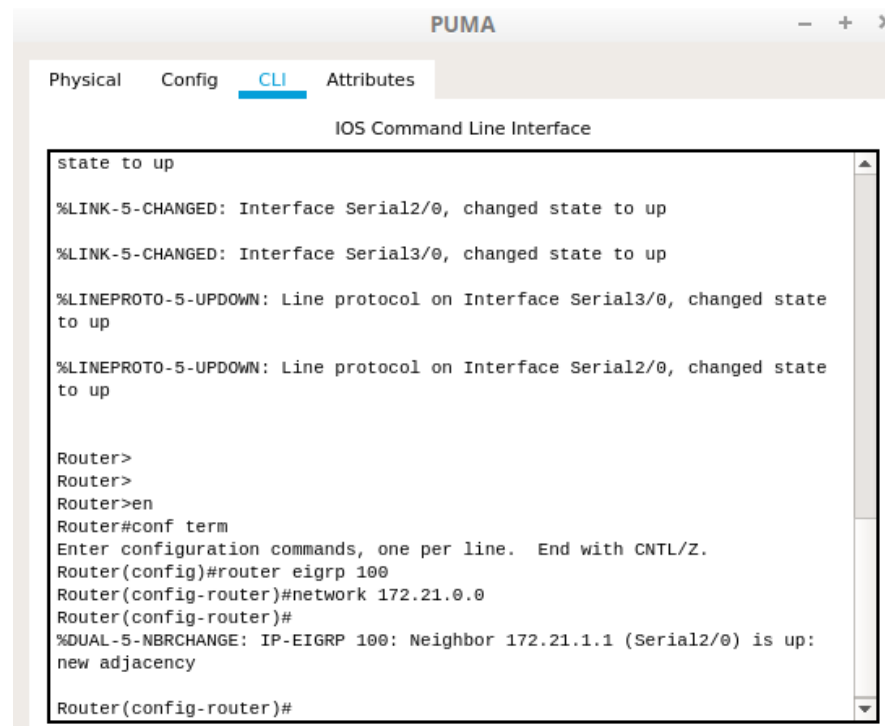
Lihat proses transaksi routing IGRP pada router eagle dengan perintah **“debug ip igrp transactions”** pada mode user. Tunggu beberapa saat untuk melihat informasi transaksi routing IGRP yang terjadi.

Catatan: Hasil tampilan perintah **“debug ip igrp transactions”** memperlihatkan informasi update routing IGRP secara detail. Untuk melihat informasi update routing IGRP secara lebih ringkas digunakan perintah **“debug ip igrp events”** (dengan lebih dahulu menonaktifkan **“debug ip igrp transaction”** dengan perintah **“no debug ip igrp transactions”**)

Lakukan konfigurasi routing IGRP pada router puma dan tiger. Perhatikan proses update routing IGRP pada router eagle (secara detail) ketika konfigurasi router puma dan tiger dilakukan.

Router Puma:

- Konfigurasi routing EIGRP pada router Puma

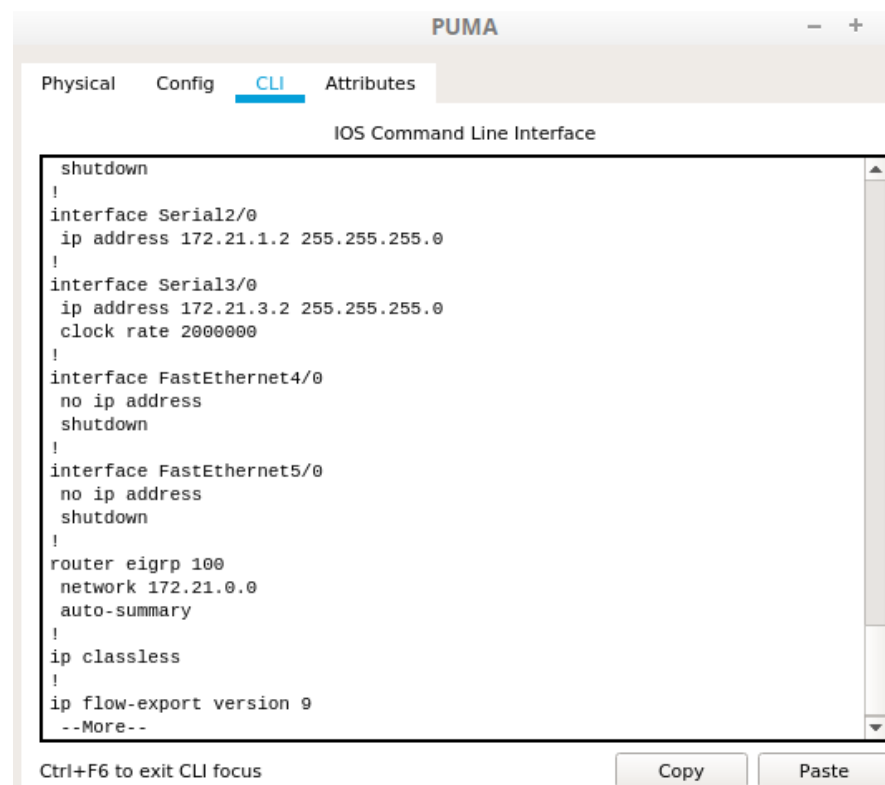


The screenshot shows the PUMA CLI interface with the 'CLI' tab selected. The 'IOS Command Line Interface' window displays the following text:

```
state to up
%LINK-5-CHANGED: Interface Serial2/0, changed state to up
%LINK-5-CHANGED: Interface Serial3/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial3/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/0, changed state to up

Router>
Router>
Router>en
Router#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#router eigrp 100
Router(config-router)#network 172.21.0.0
Router(config-router)#
%DUAL-5-NBRCHANGE: IP-EIGRP 100: Neighbor 172.21.1.1 (Serial2/0) is up:
new adjacency
Router(config-router)#
```

- Melihat konfigurasi EIGRP yang telah dibuat



The screenshot shows the PUMA CLI interface with the 'CLI' tab selected. The 'IOS Command Line Interface' window displays the following text:

```
shutdown
!
interface Serial2/0
 ip address 172.21.1.2 255.255.255.0
!
interface Serial3/0
 ip address 172.21.3.2 255.255.255.0
 clock rate 2000000
!
interface FastEthernet4/0
 no ip address
 shutdown
!
interface FastEthernet5/0
 no ip address
 shutdown
!
router eigrp 100
 network 172.21.0.0
 auto-summary
!
ip classless
!
ip flow-export version 9
--More--
```

At the bottom of the window, there is a status bar with the text 'Ctrl+F6 to exit CLI focus' and two buttons: 'Copy' and 'Paste'.

- Melihat proses transaksi routing EIGRP pada router Puma

The screenshot shows the CLI of a router named PUMA. The 'CLI' tab is selected. The output displays the following EIGRP messages:

```

EIGRP: Sending HELLO on FastEthernet0/0
  AS 100, Flags 0x0, Seq 6/0 idbQ 0/0 iidbQ un/rely 0/0

EIGRP: Sending HELLO on Serial2/0
  AS 100, Flags 0x0, Seq 6/0 idbQ 0/0 iidbQ un/rely 0/0

EIGRP: Sending HELLO on Serial3/0
  AS 100, Flags 0x0, Seq 6/0 idbQ 0/0 iidbQ un/rely 0/0

EIGRP: Received HELLO on Serial2/0 nbr 172.21.1.1
  AS 100, Flags 0x0, Seq 6/0 idbQ 0/0

EIGRP: Sending HELLO on FastEthernet0/0
  AS 100, Flags 0x0, Seq 6/0 idbQ 0/0 iidbQ un/rely 0/0

EIGRP: Sending HELLO on Serial2/0
  AS 100, Flags 0x0, Seq 6/0 idbQ 0/0 iidbQ un/rely 0/0

EIGRP: Sending HELLO on Serial3/0
  AS 100, Flags 0x0, Seq 6/0 idbQ 0/0 iidbQ un/rely 0/0

EIGRP: Sending HELLO on FastEthernet0/0
  AS 100, Flags 0x0, Seq 6/0 idbQ 0/0 iidbQ un/rely 0/0
  
```

Router Tiger:

- Konfigurasi routing EIGRP pada router Tiger

The screenshot shows the CLI of a router named TIGER. The 'CLI' tab is selected. The output displays the following messages and commands:

```

%LINK-5-CHANGED: Interface Serial3/0, changed state to up

%LINK-5-CHANGED: Interface Serial2/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/0, changed state to up

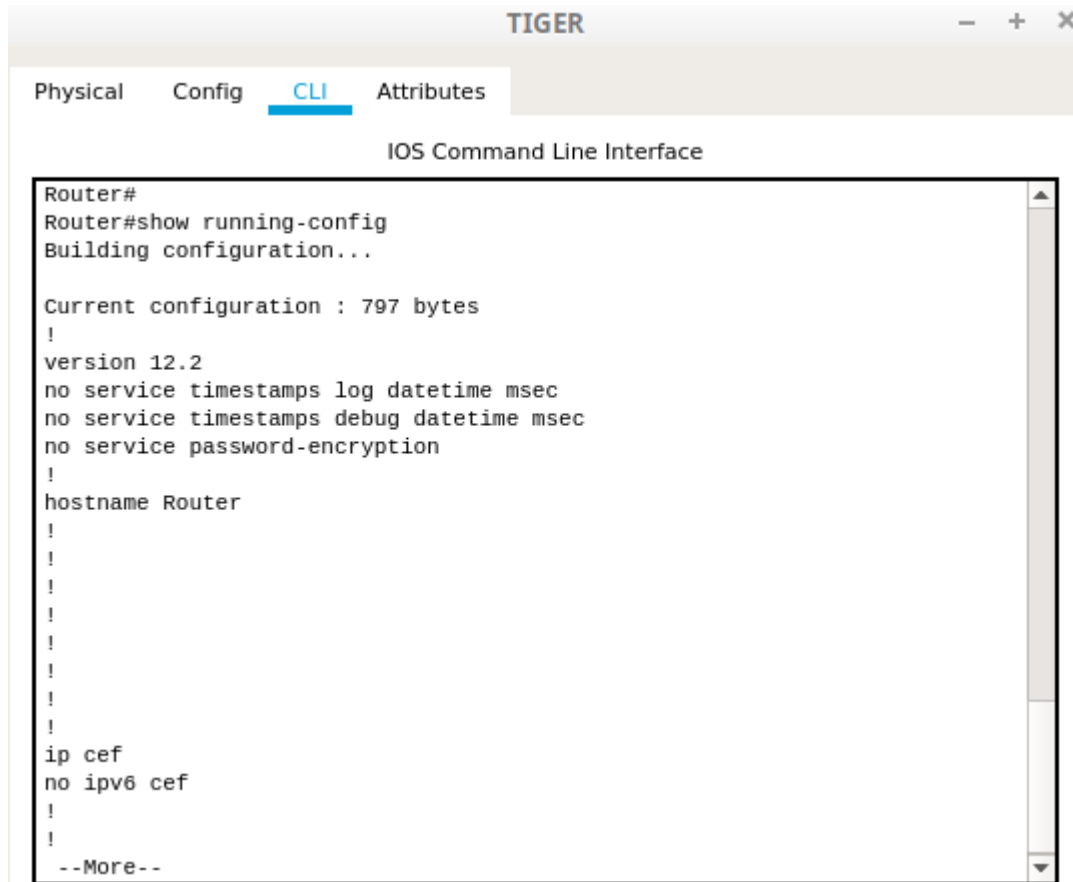
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial3/0, changed state to up

Router>
Router>
Router>en
Router#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#router eigrp 100
Router(config-router)#network 172.21.0.0
Router(config-router)#

%DUAL-5-NBRCHANGE: IP-EIGRP 100: Neighbor 172.21.3.2 (Serial3/0) is up: new adjacency

%DUAL-5-NBRCHANGE: IP-EIGRP 100: Neighbor 172.21.2.1 (Serial2/0) is up: new adjacency
  
```

- Melihat konfigurasi EIGRP yang telah dibuat



The screenshot shows a web-based interface for a router named 'TIGER'. The 'CLI' tab is selected under the 'Config' section. The 'IOS Command Line Interface' window displays the output of the 'show running-config' command. The configuration includes version 12.2, service timestamps, hostname 'Router', and IP CEF. The output is truncated with '--More--' at the bottom.

```

Router#
Router#show running-config
Building configuration...

Current configuration : 797 bytes
!
version 12.2
no service timestamps log datetime msec
no service timestamps debug datetime msec
no service password-encryption
!
hostname Router
!
!
!
!
!
!
!
!
ip cef
no ipv6 cef
!
!
--More--

```

- Melihat proses transaksi routing EIGRP pada router Tiger

```

EIGRP: Sending HELLO on FastEthernet0/0
AS 100, Flags 0x0, Seq 11/0 idbQ 0/0 iidbQ un/rely 0/0

EIGRP: Received HELLO on Serial3/0 nbr 172.21.3.2
AS 100, Flags 0x0, Seq 9/0 idbQ 0/0

EIGRP: Sending HELLO on Serial3/0
AS 100, Flags 0x0, Seq 11/0 idbQ 0/0 iidbQ un/rely 0/0

EIGRP: Sending HELLO on Serial2/0
AS 100, Flags 0x0, Seq 11/0 idbQ 0/0 iidbQ un/rely 0/0

EIGRP: Received HELLO on Serial2/0 nbr 172.21.2.1
AS 100, Flags 0x0, Seq 9/0 idbQ 0/0

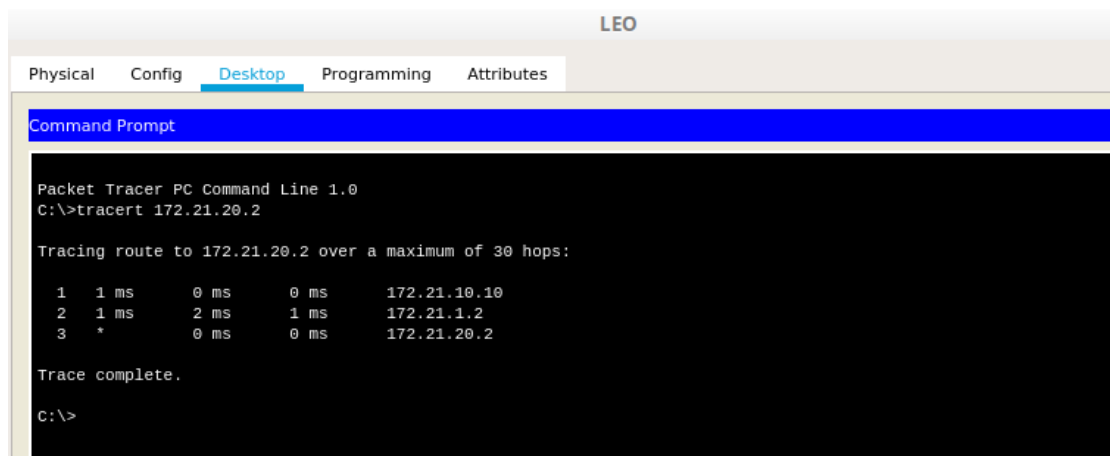
EIGRP: Sending HELLO on FastEthernet0/0
AS 100, Flags 0x0, Seq 11/0 idbQ 0/0 iidbQ un/rely 0/0

EIGRP: Received HELLO on Serial3/0 nbr 172.21.3.2
AS 100, Flags 0x0, Seq 9/0 idbQ 0/0

EIGRP: Sending HELLO on Serial3/0
AS 100, Flags 0x0, Seq 11/0 idbQ 0/0 iidbQ un/rely 0/0

```

Dari PC Leo lakukan trace ke PC Aries



```
LEO
Physical Config Desktop Programming Attributes
Command Prompt
Packet Tracer PC Command Line 1.0
C:\>tracert 172.21.20.2

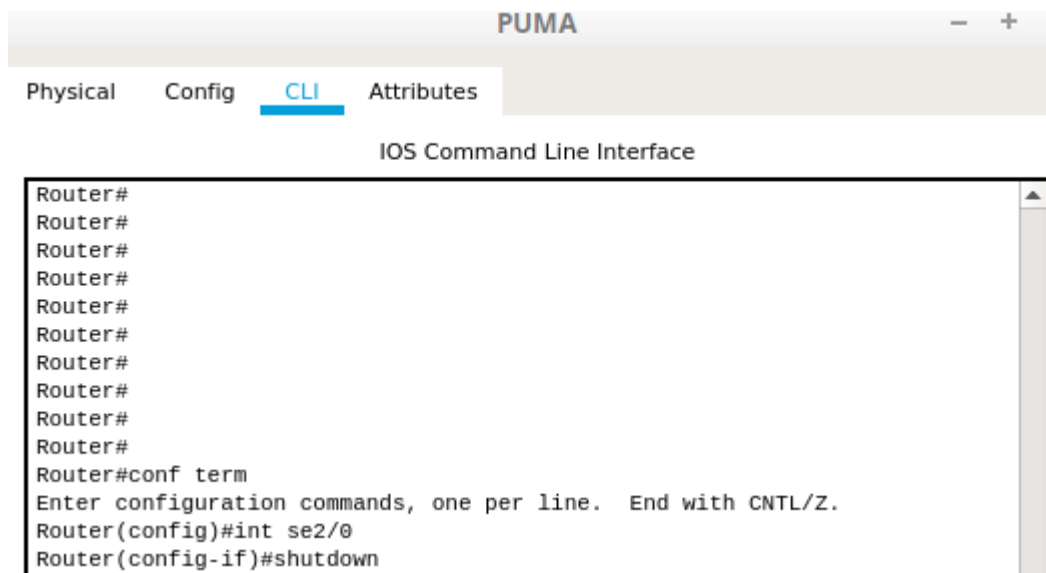
Tracing route to 172.21.20.2 over a maximum of 30 hops:

  1  1 ms    0 ms    0 ms    172.21.10.10
  2  1 ms    2 ms    1 ms    172.21.1.2
  3  *        0 ms    0 ms    172.21.20.2

Trace complete.

C:\>
```

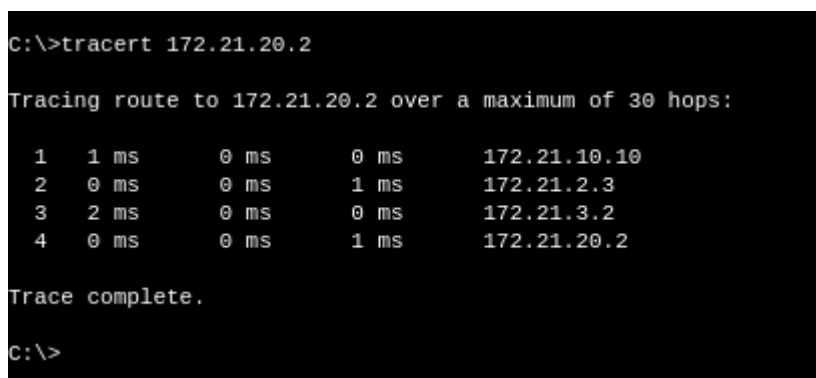
Buat hubungan antara router eagle dan puma terputus dan perhatikan proses update routing RIP yang terjadi



```
PUMA
Physical Config CLI Attributes
IOS Command Line Interface

Router#
Router#
Router#
Router#
Router#
Router#
Router#
Router#
Router#
Router#
Router#
Router#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#int se2/0
Router(config-if)#shutdown
```

Dari PC Leo lakukan trace ke PC Aries.



```
C:\>tracert 172.21.20.2

Tracing route to 172.21.20.2 over a maximum of 30 hops:

  1  1 ms    0 ms    0 ms    172.21.10.10
  2  0 ms    0 ms    1 ms    172.21.2.3
  3  2 ms    0 ms    0 ms    172.21.3.2
  4  0 ms    0 ms    1 ms    172.21.20.2

Trace complete.

C:\>
```