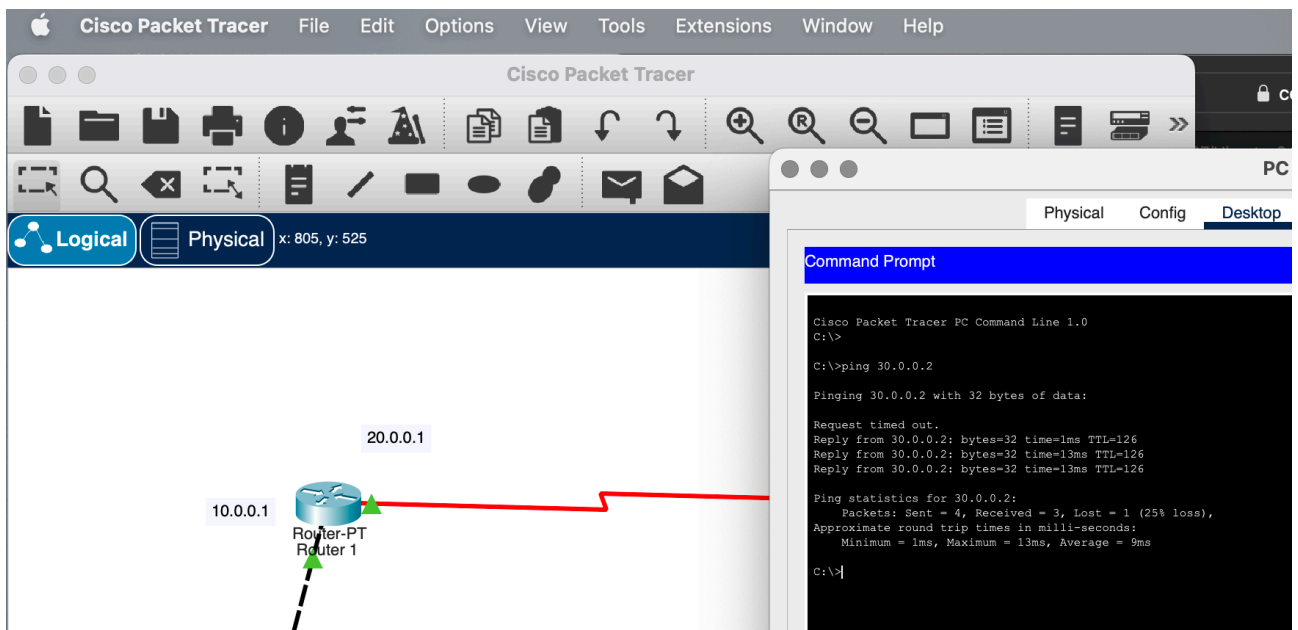
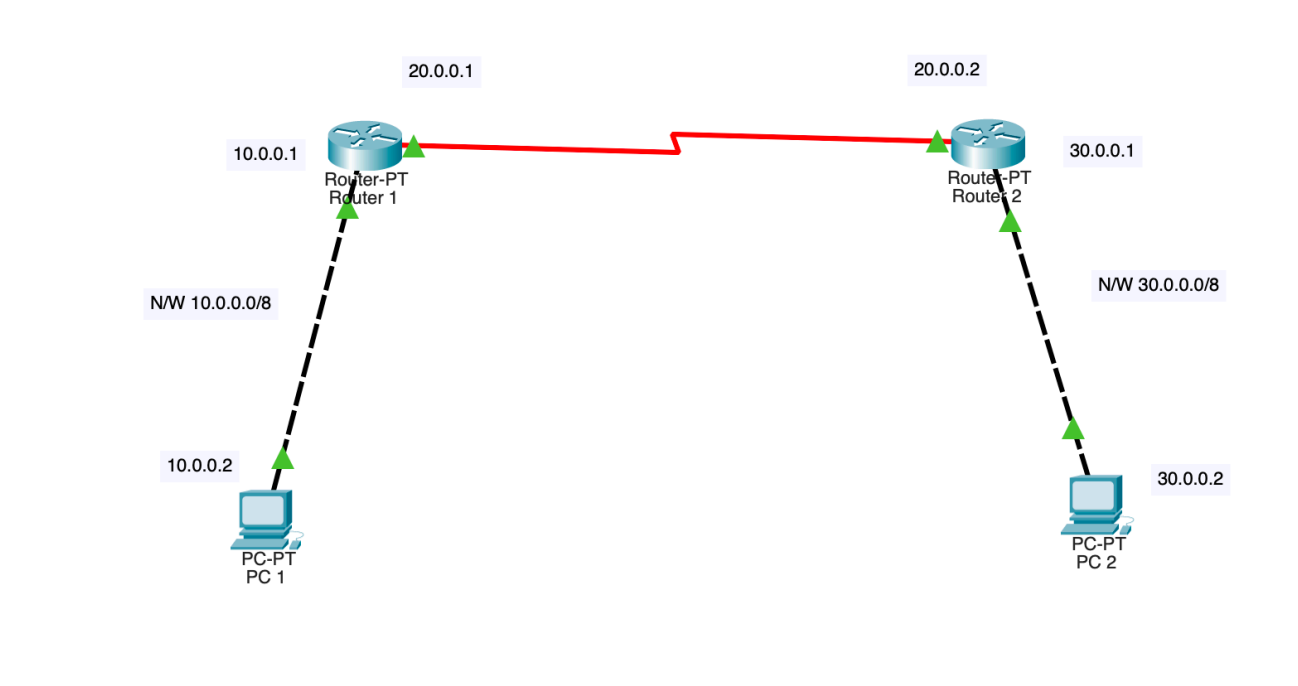
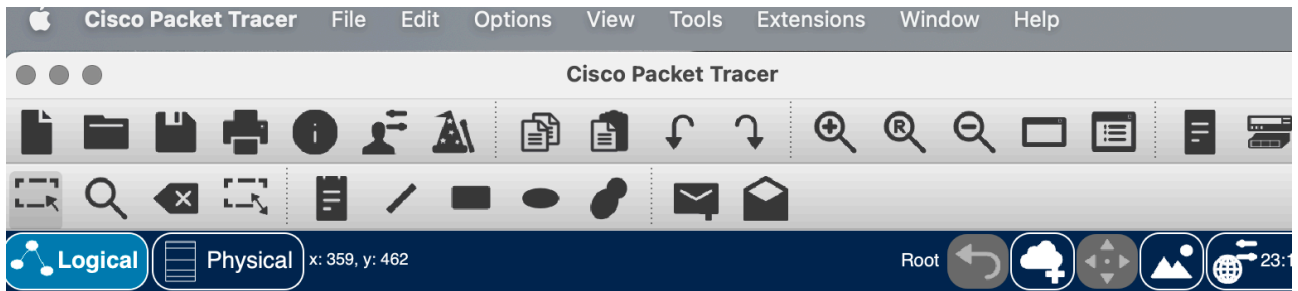


## RIP

Була проведена конфігурація, результат роботи на скриншотах.



### Command Prompt

```
Cisco Packet Tracer PC Command Line 1.0
C:\>

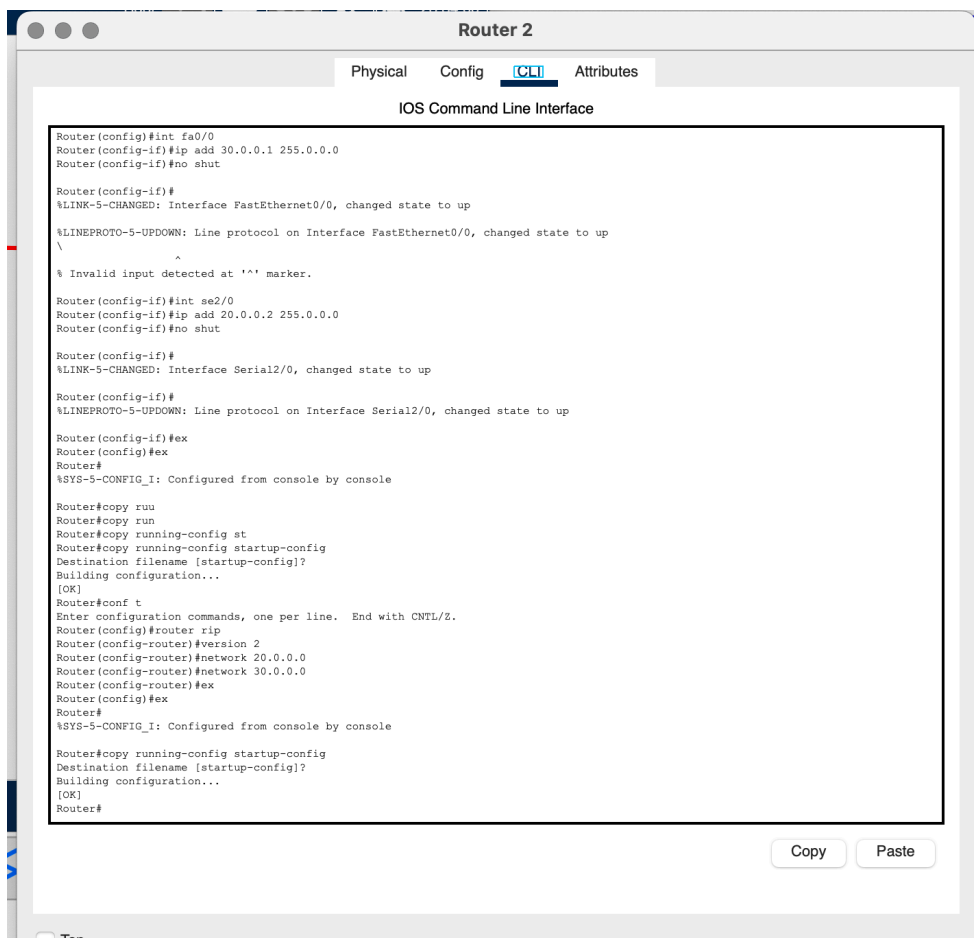
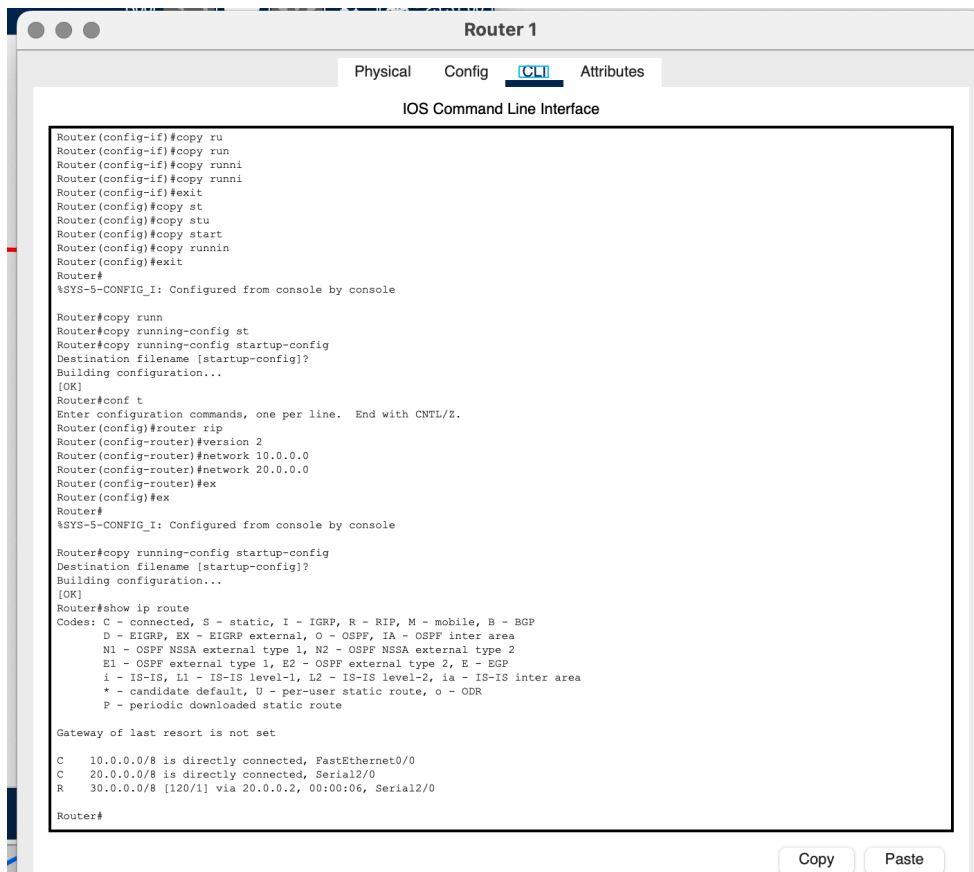
C:\>ping 30.0.0.2

Pinging 30.0.0.2 with 32 bytes of data:

Request timed out.
Reply from 30.0.0.2: bytes=32 time=1ms TTL=126
Reply from 30.0.0.2: bytes=32 time=13ms TTL=126
Reply from 30.0.0.2: bytes=32 time=13ms TTL=126

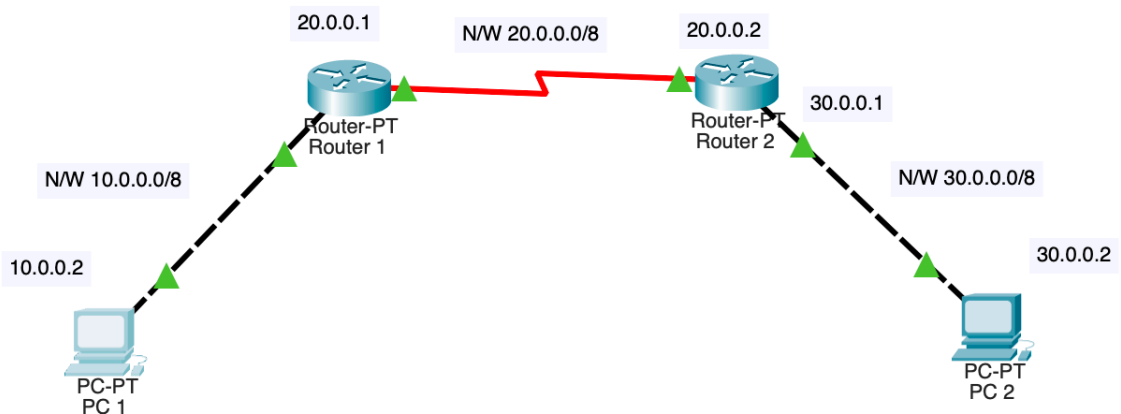
Ping statistics for 30.0.0.2:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 1ms, Maximum = 13ms, Average = 9ms

C:\>
```



## OSPF

Проведена конфігурація та тестування роботоздатності.



### Router 1

Physical Config **CLI** Attributes

IOS Command Line Interface

```
%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 se2/0
Router(config-if)#ip add 20.0.0.1 255.0.0.0
Router(config-if)#no shut
%LINK-5-CHANGED: Interface Serial2/0, changed state to down
Router(config-if)#ex
Router#
%SYS-5-CONFIG_I: Configured from console by console

Router#copy ruu
Router#copy ru
Router#copy running-config s
Router#copy running-config st
Router#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
Router#
%LINK-5-CHANGED: Interface Serial2/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/0, changed state to up

Router#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#router ospf 1
Router(config-router)#network 10.0.0.0 0.255.255.255 area 0
Router(config-router)#network 20.0.0.0 0.255.255.255 area 0
Router(config-router)#ex
Router#
%SYS-5-CONFIG_I: Configured from console by console

Router#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
Router#
00:13:45: %OSPF-5-ADJCHG: Process 1, Nbr 30.0.0.1 on Serial2/0 from LOADING to FULL, Loading Done

Router#show ip ospf neighbor

Neighbor ID    Pri   State           Dead Time   Address        Interface
30.0.0.1      0    FULL/ -         00:00:35   20.0.0.2       Serial2/0
Router#
```

### Router 2

Physical Config **CLI** Attributes

IOS Command Line Interface

```
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 se2/0
Router(config-if)#ip address 20.0.0.2 255.0.0.0
Router(config-if)#no shut
Router#
%LINK-5-CHANGED: Interface Serial2/0, changed state to up
Router(config-if)#ex
Router#
%SYS-5-CONFIG_I: Configured from console by console

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

Router#copy ru
Router#copy running-config st
Router#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
Router#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#router ospf 2
Router(config-router)#network 20.0.0.0 0.255.255.255 area0
Router(config-router)#
% Invalid input detected at '^' marker.

Router(config-router)#network 20.0.0.0 0.255.255.255 area 0
Router(config-router)#network 30.0.0.0 0.255.255.255 area 0
00:13:43: %OSPF-5-ADJCHG: Process 2, Nbr 20.0.0.1 on Serial2/0
Router(config-router)#
Router(config-router)#network 30.0.0.0 0.255.255.255 area 0
Router(config-router)#ex
Router#
%SYS-5-CONFIG_I: Configured from console by console
copy ru
Router#copy running-config st
Router#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
Router#
```

```

Cisco Packet Tracer PC Command Line 1.0
C:\>ping 30.0.0.2

Pinging 30.0.0.2 with 32 bytes of data:

Request timed out.
Reply from 30.0.0.2: bytes=32 time=1ms TTL=126
Reply from 30.0.0.2: bytes=32 time=1ms TTL=126
Reply from 30.0.0.2: bytes=32 time=14ms TTL=126

Ping statistics for 30.0.0.2:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 1ms, Maximum = 14ms, Average = 5ms

C:\>

```

## BGP

Була проведена конфігурація, але правильного рішення не отримано через помилку версії Packet Tracer. А змінна версії неможлива через MacOS та доступність версій на неї.

```

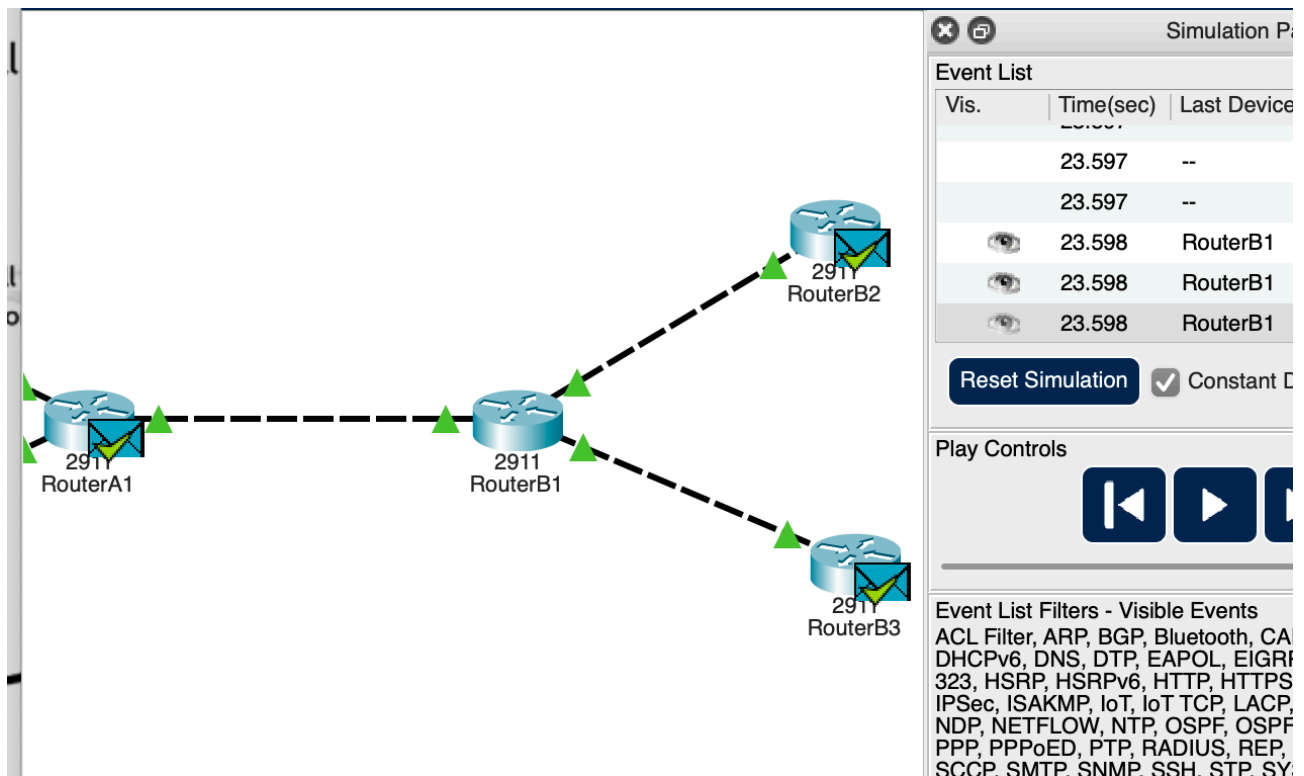
%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/1, changed state to up

Router>en
Router#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#router bgp 64600
Router(config-router)#nei
Router(config-router)#neighbor 10.0.0.2 remote-as 64700
Router(config-router)#neighbor 20.0.0.2 remote-as 64600
Router(config-router)#
%Cisco Packet Tracer does not support internal BGP in this version. Only external neighbors are supported.

Router(config-router)#neighbor 30.0.0.2 remote-as 64600
Router(config-router)#
%Cisco Packet Tracer does not support internal BGP in this version. Only external neighbors are supported.

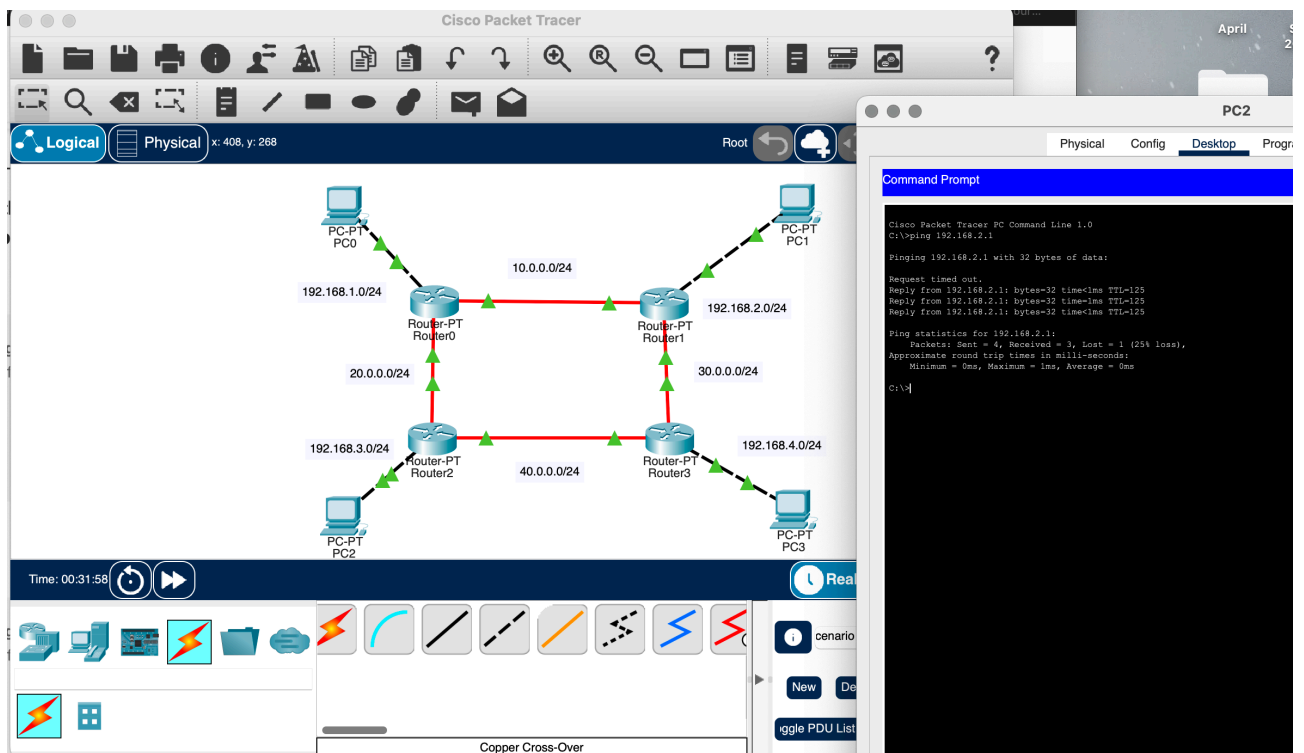
Router(config-router)#neighbor

```



## EIGRP

Сконфігуровано без помилково та виведений результат на скрінках внизу.



Cisco Packet Tracer

Logical Physical x: 842, y: 414

Root 15:03:30

Simulation Panel

Event List

Vis.	Time(sec)	Last Device
1.829	Router1	
1.855	--	
1.856	Router1	
2.296	--	
2.297	Router2	

Reset Simulation ☒ Constant Delay Captured to: 2.297 s

Play Controls

Event List Filters - Visible Events

ACL Filter, ARP, BGP, Bluetooth, CAPWAP, CDP, DHCP, DHCPv6, DNS, DTP, EAPOL, EIGRP, EIGRPv6, FTP, H.323, HSRP, HSRPv6, HTTP, HTTPS, ICMP, ICMPv6, IPSec, ISAKMP, IoT, IoT TCP, LACP, LLDP, Meraki, NDP, NETFLOW, NTP, OSPF, OSPFv6, PAgP, POP3

Time: 00:32:15.293 PLAY CONTROLS:

Scenario 0

New Delete

Toggle PDU List Window

Copper Cross-Over

Programming <https://packettrac.com/lesson/eigrp-configuration-with-packet-tracer/>

Cisco Packet Tracer

Logical Physical x: 386, y: 162

Root 15:19:30

Simulation Panel

Event List

Vis.	Time(sec)	Last Device
3.660	--	
3.661	Router3	
4.492	--	
4.493	Router1	
5.363	--	

Reset Simulation ☒ Constant Delay Captured to: 5.363 s

Play Controls

Event List Filters - Visible Events

ACL Filter, ARP, BGP, Bluetooth, CAPWAP, CDP, DHCP, DHCPv6, DNS, DTP, EAPOL, EIGRP, EIGRPv6, FTP, H.323, HSRP, HSRPv6, HTTP, HTTPS, ICMP, ICMPv6, IPSec, ISAKMP, IoT, IoT TCP, LACP, LLDP, Meraki, NDP, NETFLOW, NTP, OSPF, OSPFv6, PAgP, POP3

Time: 00:32:18.359 PLAY CONTROLS:

Scenario 0

New Delete

Toggle PDU List Window

Copper Cross-Over