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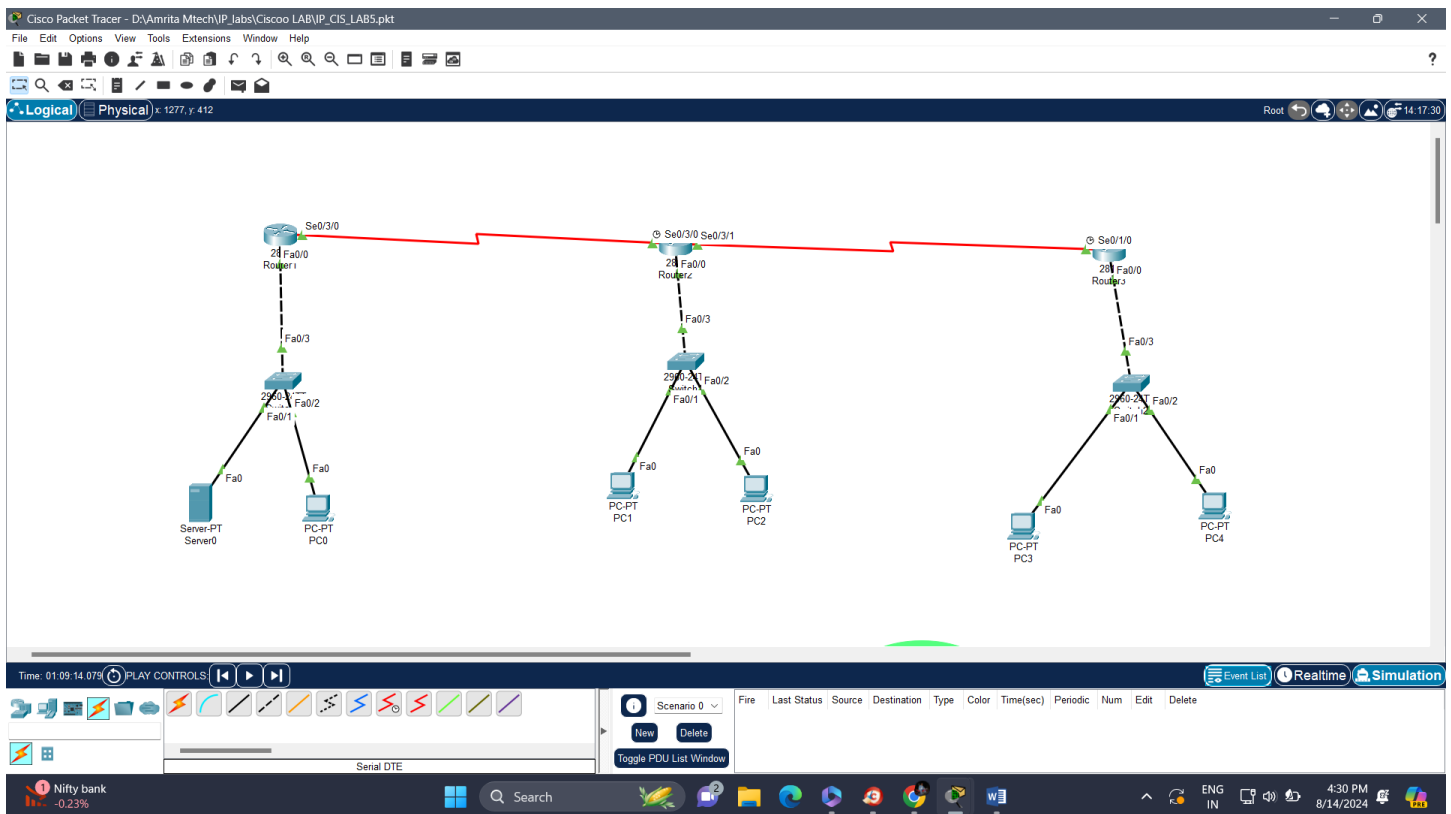
CB.SC.P2CYS24018

Configuring Routing using RIP and OSPF :-

Instructions

Refer the image attached for the network architecture. And Use RIP and OSPF to configure the routing. All end devices should communicate with each other. Analyze the packets using simulation mode This will be considered as the result.

1.RIP



ROUTER 1:-

The screenshot shows the configuration window for Router1. The 'Config' tab is active, and the 'ROUTING' section is expanded, with 'RIP' selected. The 'RIP Routing' configuration area shows a list of network addresses: 12.0.0.0, 23.0.0.0, 192.168.1.0, 192.168.2.0, and 192.168.3.0. The 'Equivalent IOS Commands' section displays the following commands:

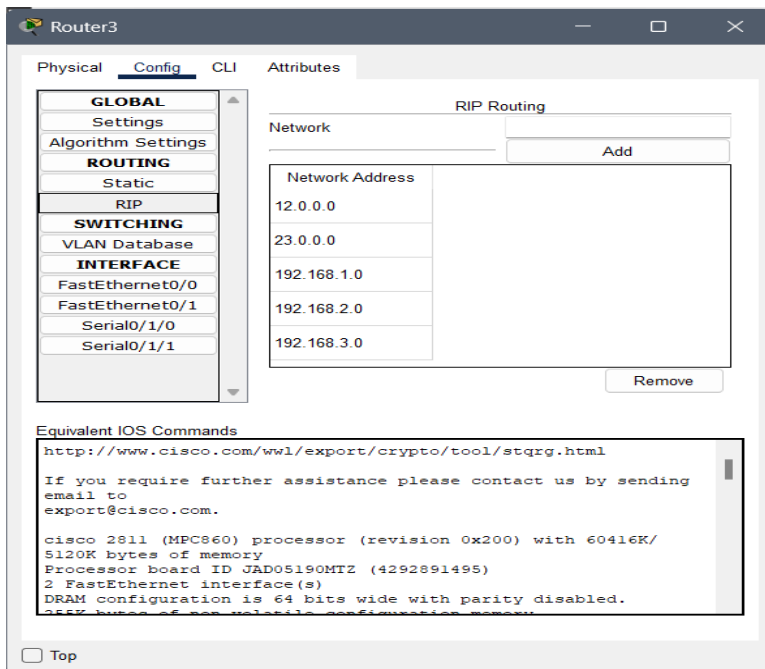
```
%LINK-3-UPDOWN: Interface Serial0/3/0, changed state to down
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial0/3/0, changed state to down
%LINK-5-CHANGED: Interface Serial0/3/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial0/3/0, changed state to up
```

Router 2:-

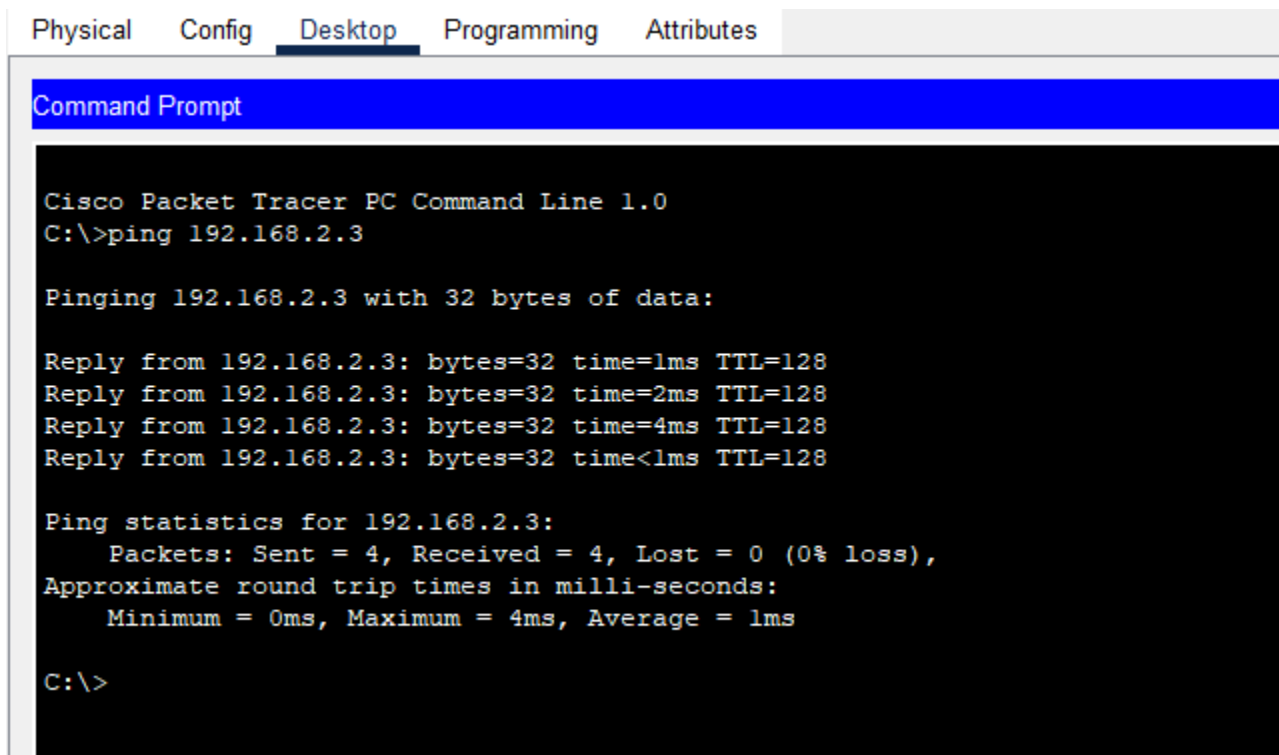
The screenshot shows the configuration window for Router2. The 'Config' tab is active, and the 'ROUTING' section is expanded, with 'RIP' selected. The 'RIP Routing' configuration area shows a list of network addresses: 12.0.0.0, 23.0.0.0, 192.168.1.0, 192.168.2.0, and 192.168.3.0. The 'Equivalent IOS Commands' section displays the following commands:

```
Router(config-if)#exit
Router(config)#interface Serial0/3/0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface Serial0/3/1
Router(config-if)#ip address 23.1.1.2 255.0.0.0
Router(config-if)#ip address 23.1.1.2 255.0.0.0
Router(config-if)#
```

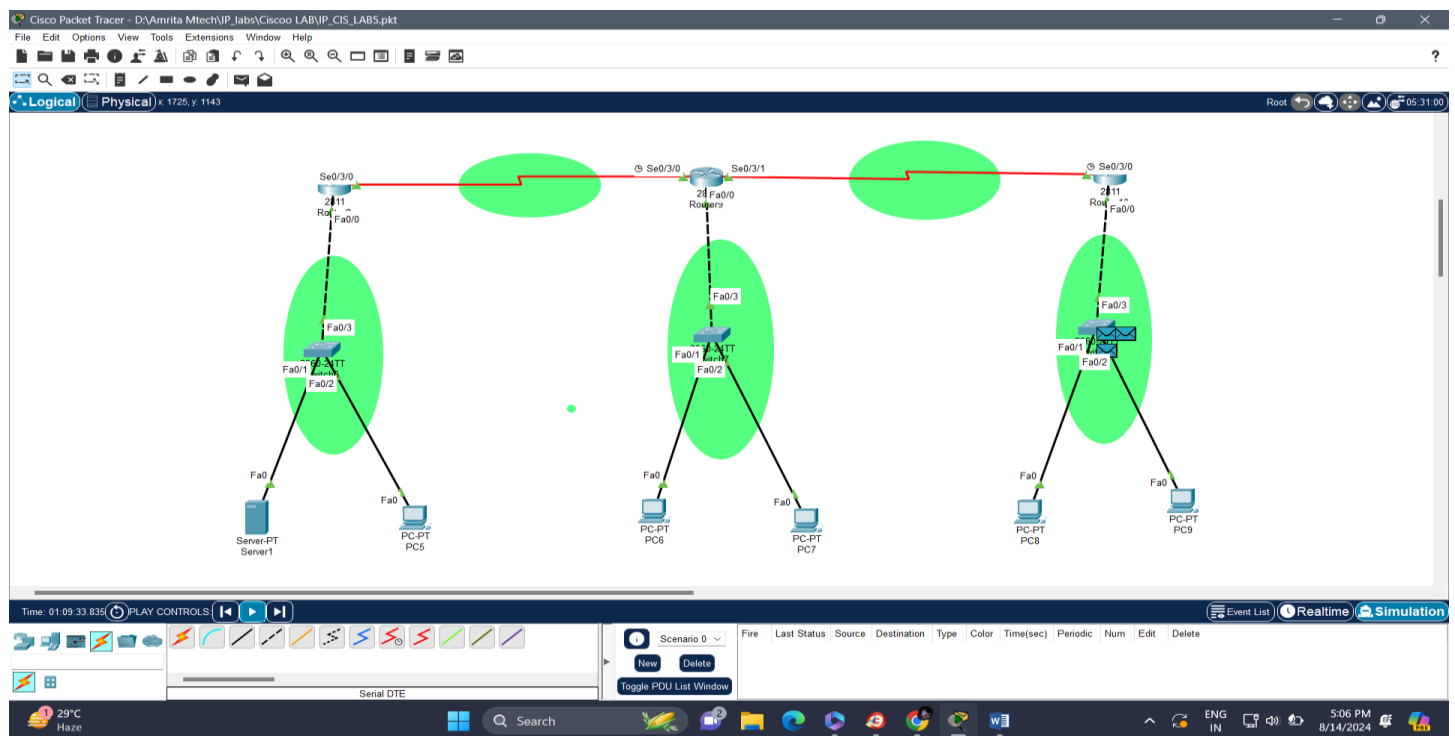
Router 3:-



Ping command



OSPF:-



Router 1:

```
!
interface FastEthernet0/0
 ip address 192.168.1.1 255.255.255.0
 duplex auto
 speed auto
!
interface FastEthernet0/1
 no ip address
 duplex auto
 speed auto
 shutdown
!
interface Serial0/3/0
 ip address 12.1.1.1 255.0.0.0
!
interface Serial0/3/1
 no ip address
 clock rate 2000000
 shutdown
!
interface Vlan1
 no ip address
 shutdown
!
router ospf 1
 log-adjacency-changes
 network 192.168.1.0 0.0.0.255 area 0
 network 12.1.1.0 0.0.0.3 area 0
!
ip classless
!
ip flow-export version 9
!
```

Router 2:

```
interface FastEthernet0/0
 ip address 192.168.2.1 255.255.255.0
 duplex auto
 speed auto
!
interface FastEthernet0/1
 no ip address
 duplex auto
 speed auto
 shutdown
!
interface Serial0/3/0
 ip address 12.1.1.2 255.0.0.0
 clock rate 2000000
!
interface Serial0/3/1
 ip address 23.1.1.2 255.0.0.0
!
interface Vlan1
 no ip address
 shutdown
!
router ospf 2
 log-adjacency-changes
 network 192.168.2.0 0.0.0.255 area 2
 network 12.1.1.0 0.0.0.3 area 0
 network 23.1.1.0 0.0.0.3 area 1
!
ip classless
!
ip flow-export version 9
!
```

Router 3

```
!
interface FastEthernet0/0
 ip address 192.168.3.1 255.255.255.0
 duplex auto
 speed auto
!
interface FastEthernet0/1
 no ip address
 duplex auto
 speed auto
 shutdown
!
interface Serial0/3/0
 ip address 23.1.1.1 255.0.0.0
 clock rate 2000000
!
interface Serial0/3/1
 no ip address
 clock rate 2000000
 shutdown
!
interface Vlan1
 no ip address
 shutdown
!
router ospf 3
 log-adjacency-changes
 network 192.168.3.0 0.0.0.255 area 1
 network 23.1.1.0 0.0.0.3 area 1
!
ip classless
!
ip flow-export version 9
!
```

Ping

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 192.168.1.3

Pinging 192.168.1.3 with 32 bytes of data:

Reply from 192.168.1.3: bytes=32 time=3ms TTL=128
Reply from 192.168.1.3: bytes=32 time=1ms TTL=128
Reply from 192.168.1.3: bytes=32 time=3ms TTL=128
Reply from 192.168.1.3: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.1.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 3ms, Average = 1ms

C:\>
```