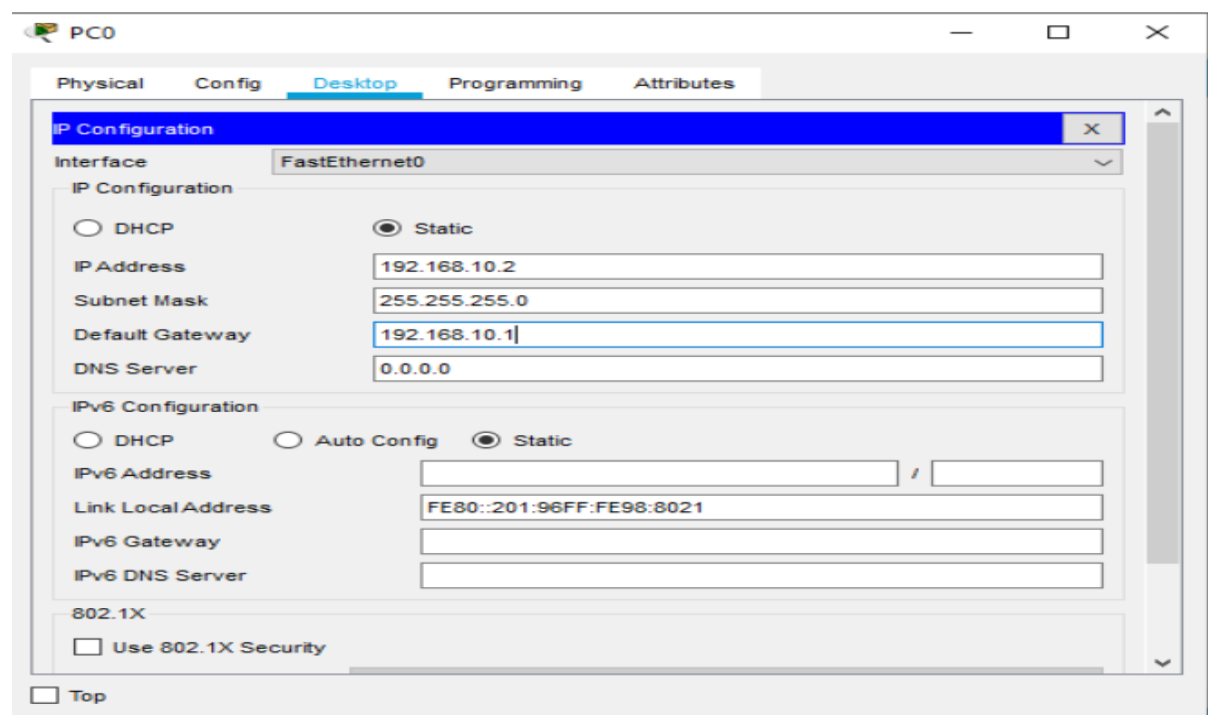
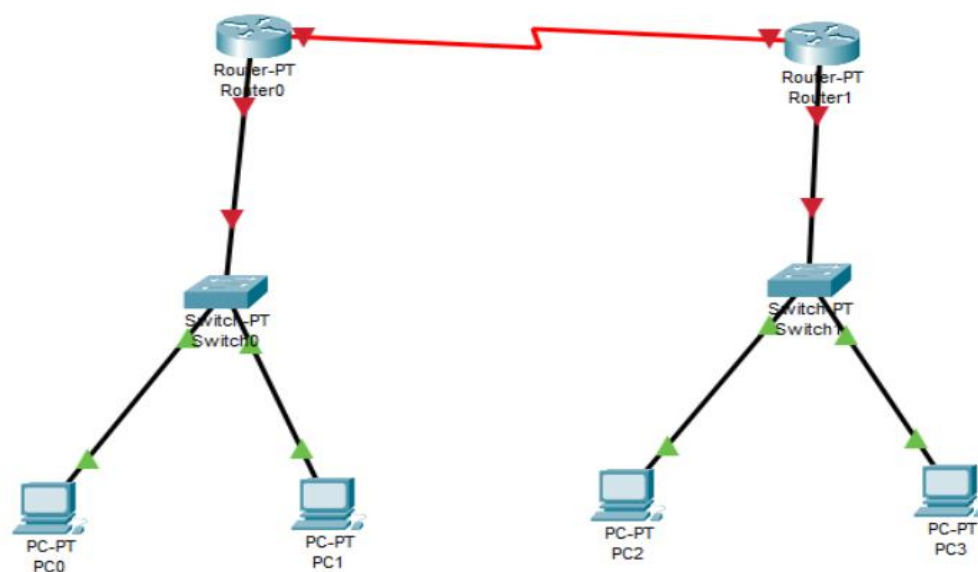


CISCO PACKET TRACER LAB -5 (Configuring static routing via two router & each router have one switch and 2pc.

- 1.First I connect then by the help of wire.
2. Then I assign ip to the pc.
3. Then I convert red colour path signal to green by the help of CLI.
5. Then I give the correct ip route to the router .
6. Then I successfully ping one pc to another.

Here is the all step:-



PC1

Physical Config **Desktop** Programming Attributes

IP Configuration [X]

Interface: FastEthernet0

IP Configuration

☐ DHCP ☒ Static

IP Address: 192.168.10.3

Subnet Mask: 255.255.255.0

Default Gateway: 192.168.10.1

DNS Server: 0.0.0.0

IPv6 Configuration

☐ DHCP ☐ Auto Config ☒ Static

IPv6 Address: /

Link Local Address: FE80::201:96FF:FEC9:A74D

IPv6 Gateway:

IPv6 DNS Server:

802.1X

☐ Use 802.1X Security

Top

PC2

Physical Config **Desktop** Programming Attributes

IP Configuration [X]

Interface: FastEthernet0

IP Configuration

☐ DHCP ☒ Static

IP Address: 192.168.20.2

Subnet Mask: 255.255.255.0

Default Gateway: 192.168.20.1

DNS Server: 0.0.0.0

IPv6 Configuration

☐ DHCP ☐ Auto Config ☒ Static

IPv6 Address: /

Link Local Address: FE80::260:47FF:FE90:85B5

IPv6 Gateway:

IPv6 DNS Server:

802.1X

☐ Use 802.1X Security

Top

PC3

Physical Config **Desktop** Programming Attributes

IP Configuration

Interface: FastEthernet0

IP Configuration

☐ DHCP ☒ Static

IP Address: 192.168.20.3

Subnet Mask: 255.255.255.0

Default Gateway: 192.168.20.1

DNS Server: 0.0.0.0

IPv6 Configuration

☐ DHCP ☐ Auto Config ☒ Static

IPv6 Address: /

Link Local Address: FE80::2E0:8FFF:FE18:4D80

IPv6 Gateway:

IPv6 DNS Server:

802.1X

☐ Use 802.1X Security

☐ Top

Physical Config **CLI** Attributes

IOS Command Line Interface

```
no

Press RETURN to get started!

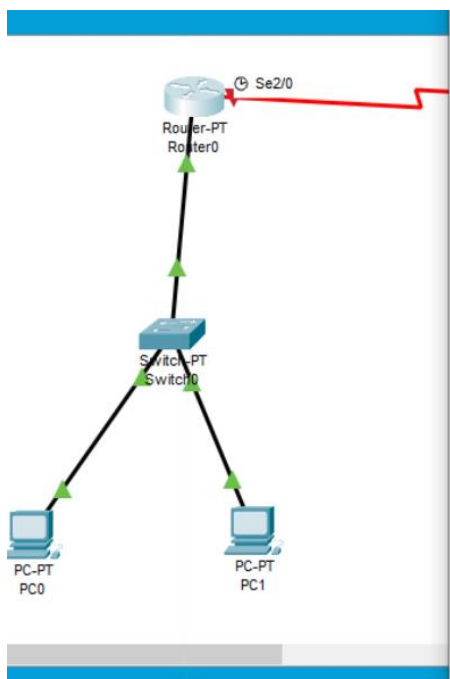
Router>en
Router#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#int fas
Router(config)#int fastEthernet 0/0
Router(config-if)#ip add
Router(config-if)#ip address 192.168.10.1 255.255.255.0
Router(config-if)#no shut
Router(config-if)#no shutdown

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)#
Router(config-if)#
```

Ctrl+F6 to exit CLI focus

☐ Top



Router1

Physical Config CLI Attributes

IOS Command Line Interface

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

Press RETURN to get started!

Router>en
Router#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#int fa
Router(config)#int fastEthernet 0/0
Router(config-if)#ip add
Router(config-if)#ip address 192.168.20.1 255.255.255.0
Router(config-if)#no shut
Router(config-if)#no shutdown

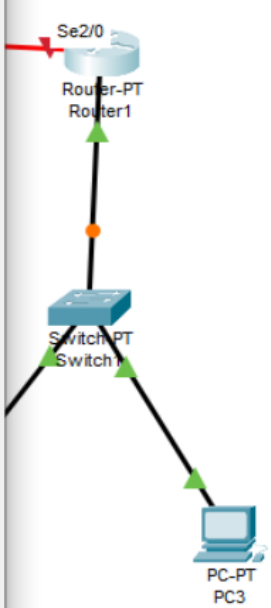
Router(config-if)#
%LINK-S-CHANGED: Interface FastEthernet0/0, changed state to up

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

Ctrl+F6 to exit CLI focus

Copy Paste

☐ Top



Router0

Physical Config CLI Attributes

IOS Command Line Interface

```
%LINK-S-CHANGED: Interface FastEthernet0/0, changed state to up

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

Router(config-if)#
Router(config-if)#exit
Router(config)#int se
Router(config)#int serial 2/0
Router(config-if)#ip add
Router(config-if)#ip address 10.0.0.1 255.0.0.0
Router(config-if)#no shu
Router(config-if)#no shutdown

%LINK-S-CHANGED: Interface Serial2/0, changed state to down
Router(config-if)#
Router(config-if)#ban
Router(config-if)#bandwidth 64
Router(config-if)#exit
Router(config)#
%LINK-S-CHANGED: Interface Serial2/0, changed state to up

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

Ctrl+F6 to exit CLI focus

Copy Paste

☐ Top

Router1

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)#
Router(config-if)#exit
Router(config)#int se
Router(config)#int serial 2/0
Router(config-if)#ip add
Router(config-if)#ip address 10.0.0.2 255.0.0.0
Router(config-if)#no shut
Router(config-if)#no shutdown

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

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

Router(config)#
Router(config)#
```

Ctrl+F6 to exit CLI focus

Copy Paste

☐ Top



Router1

Physical Config CLI Attributes

IOS Command Line Interface

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

Router(config)#
Router(config)#do sh ip rou
Router(config)#do 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

C    10.0.0.0/8 is directly connected, Serial2/0
C    192.168.20.0/24 is directly connected, FastEthernet0/0

Router(config)#
```

Ctrl+F6 to exit CLI focus

Copy Paste

☐ Top

Router1

Physical Config CLI Attributes

IOS Command Line Interface

```
Gateway of last resort is not set

C    10.0.0.0/8 is directly connected, Serial2/0
C    192.168.20.0/24 is directly connected, FastEthernet0/0

Router(config)#ip route 192.168.10.0 255.255.255.0 10.0.0.1
Router(config)#
Router(config)#do 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

C    10.0.0.0/8 is directly connected, Serial2/0
S    192.168.10.0/24 [1/0] via 10.0.0.1
C    192.168.20.0/24 is directly connected, FastEthernet0/0

Router(config)#
```

Ctrl+F6 to exit CLI focus

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☐ Top



Router0

Physical Config **CLI** Attributes

IOS Command Line Interface

```
Router(config-if)#bandwidth 64
Router(config-if)#exit
Router(config)#
%LINK-5-CHANGED: Interface Serial2/0, changed state to up

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

Router(config)#do 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

C    10.0.0.0/8 is directly connected, Serial2/0
C    192.168.10.0/24 is directly connected, FastEthernet0/0
Router(config)#
```

Ctrl+F6 to exit CLI focus

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☐ Top

Router0

Physical Config **CLI** Attributes

IOS Command Line Interface

```
Gateway of last resort is not set

C    10.0.0.0/8 is directly connected, Serial2/0
C    192.168.10.0/24 is directly connected, FastEthernet0/0

Router(config)#ip route 192.168.20.0 255.255.255.0 10.0.0.2
Router(config)#do 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

C    10.0.0.0/8 is directly connected, Serial2/0
C    192.168.10.0/24 is directly connected, FastEthernet0/0
S    192.168.20.0/24 [1/0] via 10.0.0.2
Router(config)#
```

Ctrl+F6 to exit CLI focus

Copy Paste

☐ Top

PC0

Physical Config Desktop Programming Attributes

Command Prompt

```
Packet Tracer PC Command Line 1.0
C:\>ping 192.168.20.2

Pinging 192.168.20.2 with 32 bytes of data:

Request timed out.
Reply from 192.168.20.2: bytes=32 time=1ms TTL=126
Reply from 192.168.20.2: bytes=32 time=1ms TTL=126
Reply from 192.168.20.2: bytes=32 time=1ms TTL=126

Ping statistics for 192.168.20.2:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 1ms, Maximum = 1ms, Average = 1ms

C:\>ping 192.168.20.3

Pinging 192.168.20.3 with 32 bytes of data:

Request timed out.
Reply from 192.168.20.3: bytes=32 time=1ms TTL=126
Reply from 192.168.20.3: bytes=32 time=2ms TTL=126
Reply from 192.168.20.3: bytes=32 time=1ms TTL=126

Ping statistics for 192.168.20.3:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
```

☐ Top

PC3

Physical Config Desktop Programming Attributes

Command Prompt

```
Packet Tracer PC Command Line 1.0
C:\>ping 192.168.10.2

Pinging 192.168.10.2 with 32 bytes of data:

Reply from 192.168.10.2: bytes=32 time=2ms TTL=126
Reply from 192.168.10.2: bytes=32 time=1ms TTL=126
Reply from 192.168.10.2: bytes=32 time=1ms TTL=126
Reply from 192.168.10.2: bytes=32 time=1ms TTL=126

Ping statistics for 192.168.10.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 1ms, Maximum = 2ms, Average = 1ms

C:\>ping 192.168.10.3

Pinging 192.168.10.3 with 32 bytes of data:

Request timed out.
Reply from 192.168.10.3: bytes=32 time=1ms TTL=126
Reply from 192.168.10.3: bytes=32 time=1ms TTL=126
Reply from 192.168.10.3: bytes=32 time=6ms TTL=126

Ping statistics for 192.168.10.3:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
```

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