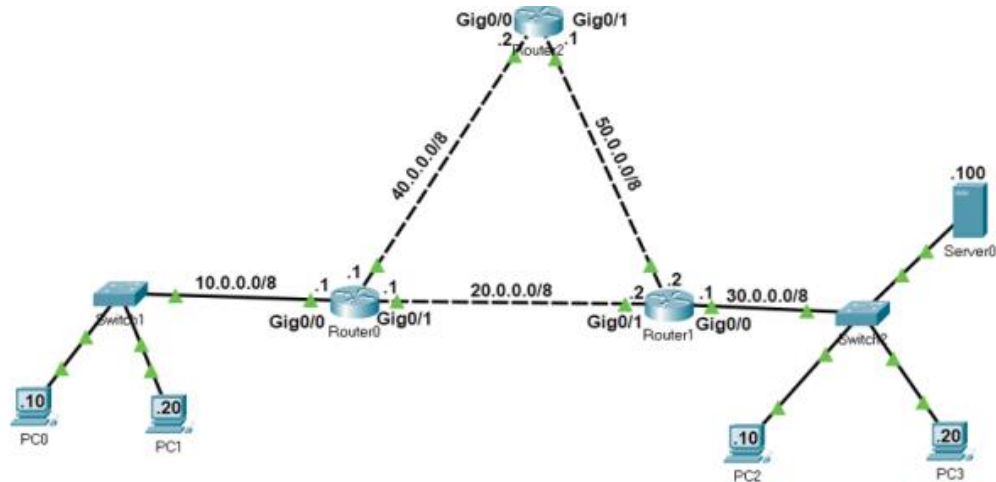


EX.NO:12

STATIC ROUTING CONFIGURATION USING CISCO PACKET TRACER



PC0

Physical Config Desktop Programming Attributes

☐ DHCP ☒ Static

IP Address 192.168.1.1

Subnet Mask 255.255.255.0

Default Gateway 192.168.1.3

DNS Server 0.0.0.0

PC1

Physical Config Desktop Programming Attributes

☐ DHCP ☒ Static

IP Address 192.168.1.2

Subnet Mask 255.255.255.0

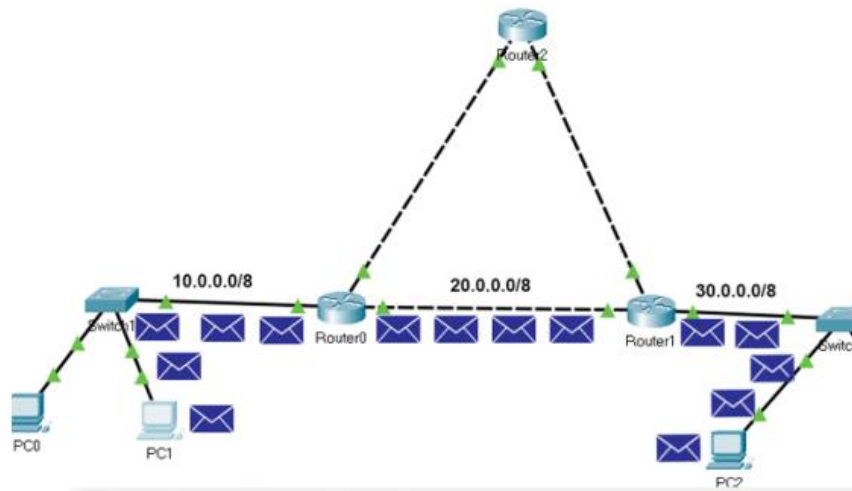
Default Gateway 192.168.1.3

DNS Server 0.0.0.0

```
Router(config)#ip route 192.168.2.0 255.255.255.0 gigabitEthernet 0/0
%Default route without gateway, if not a point-to-point interface,
may impact performance
```

```
Router(config)#ip route 192.168.1.0 255.255.255.0 gigabitEthernet 0/1
%Default route without gateway, if not a point-to-point interface,
may impact performance
```

```
Router>enable
Router#configure terminal
Enter configuration commands, one per line. End with
Router(config)#ip route 10.0.0.0 255.0.0.0 40.0.0.1
Router(config)#ip route 30.0.0.0 255.0.0.0 50.0.0.2
Router(config)#exit
Router#show ip route static
S    10.0.0.0/8 [1/0] via 40.0.0.1
S    30.0.0.0/8 [1/0] via 50.0.0.2
```



```
Physical  Config  CLI  Attributes
IOS Command Line Interface

Router>enable
Router#show ip route static
    30.0.0.0/8 is variably subnetted, 2 subnets, 2 masks
S    30.0.0.0/8 [10/0] via 20.0.0.2
S    30.0.0.100/32 [10/0] via 40.0.0.2
S    50.0.0.0/8 [10/0] via 40.0.0.2
```

```
Command Prompt

C:\>tracert 30.0.0.20

Tracing route to 30.0.0.20 over a maximum of 30 hops:

  1  0 ms    0 ms    0 ms    10.0.0.1
  2  0 ms    0 ms    0 ms    20.0.0.2
```

```
Router>enable
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface fastEthernet 0/0
Router(config-if)#ip address 20.0.0.1 255.0.0.0
Router(config-if)#no shutdown
Router(config-if)#exit
Router(config)#interface serial 0/0/0
Router(config-if)#ip address 192.168.1.245 255.255.255.252
Router(config-if)#no shutdown
Router(config-if)#exit
Router(config)#interface serial 0/0/1
Router(config-if)#ip address 192.168.1.253 255.255.255.252
Router(config-if)#no shutdown
Router(config-if)#exit
```

```
Router0(config)#router rip
Router0(config-router)# network 10.0.0.0
Router0(config-router)# network 192.168.1.252
Router0(config-router)# network 192.168.1.248
```

```
PC>ipconfig

FastEthernet0 Connection:(default port)
Link-local IPv6 Address.....: FE80::260:70FE
IP Address.....: 20.0.0.2
Subnet Mask.....: 255.0.0.0
Default Gateway.....: 20.0.0.1

PC>ping 10.0.0.2

Pinging 10.0.0.2 with 32 bytes of data:

Request timed out.
Reply from 10.0.0.2: bytes=32 time=3ms TTL=126
Reply from 10.0.0.2: bytes=32 time=3ms TTL=126
Reply from 10.0.0.2: bytes=32 time=3ms TTL=126

Ping statistics for 10.0.0.2:
    Packets: Sent = 4, Received = 3, Lost = 1 (25%)
    Approximate round trip times in milli-seconds:
        Minimum = 3ms, Maximum = 3ms, Average = 3ms
```