Before static routing:

```
Packet Tracer PC Command Line 1.0
PC>ping 40.0.0.1

Pinging 40.0.0.1 with 32 bytes of data:

Reply from 10.0.0.2: Destination host unreachable.
Reply from 10.0.0.2: Destination host unreachable.
Reply from 10.0.0.2: Destination host unreachable.
Reply from 10.0.0.2: Destination host unreachable.

Ping statistics for 40.0.0.1:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
```

After static routing:

```
PC>ping 40.0.0.1

Pinging 40.0.0.1 with 32 bytes of data:

Reply from 40.0.0.1: bytes=32 time=8ms TTL=125
Reply from 40.0.0.1: bytes=32 time=5ms TTL=125
Reply from 40.0.0.1: bytes=32 time=6ms TTL=125
Reply from 40.0.0.1: bytes=32 time=7ms TTL=125

Ping statistics for 40.0.0.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 5ms, Maximum = 8ms, Average = 6ms
```

IP route:

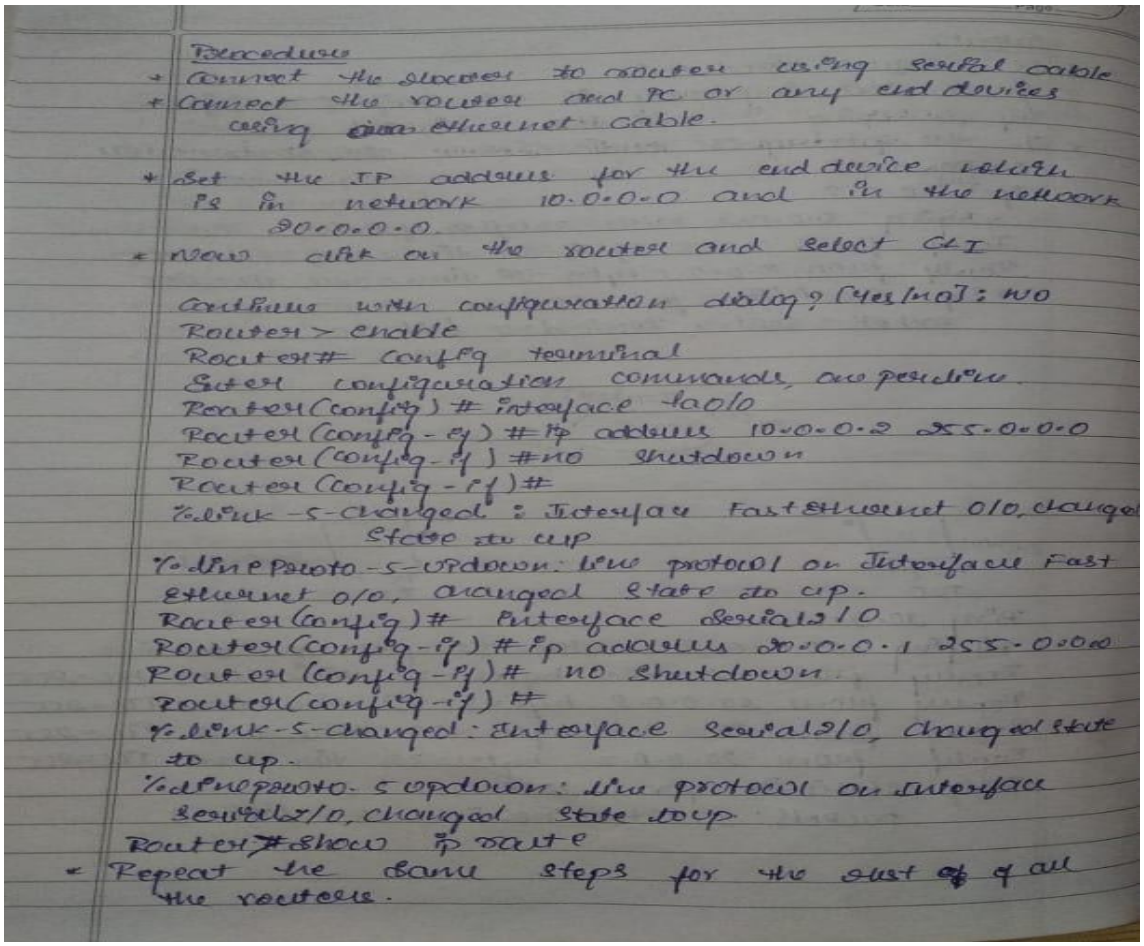
```
Router>show ip route
Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2, E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

C    10.0.0.0/8 is directly connected, FastEthernet0/0
C    20.0.0.0/8 is directly connected, Serial2/0
S    30.0.0.0/8 [1/0] via 20.0.0.2
S    40.0.0.0/8 [1/0] via 30.0.0.2
                [1/0] via 20.0.0.2
Router>
```

Simulation:

Event List

Vis.	Time(sec)	Last Device	At Device	Type	Info
	0.000	--	PC0	ICMP	
	0.001	PC0	Router0	ICMP	
	0.002	Router0	Router1	ICMP	
	0.003	Router1	Router3	ICMP	
	0.004	Router3	PC2	ICMP	
	0.005	PC2	Router3	ICMP	
	0.006	Router3	Router1	ICMP	
	0.007	Router1	Router0	ICMP	
	0.008	Router0	PC0	ICMP	

Procedure:

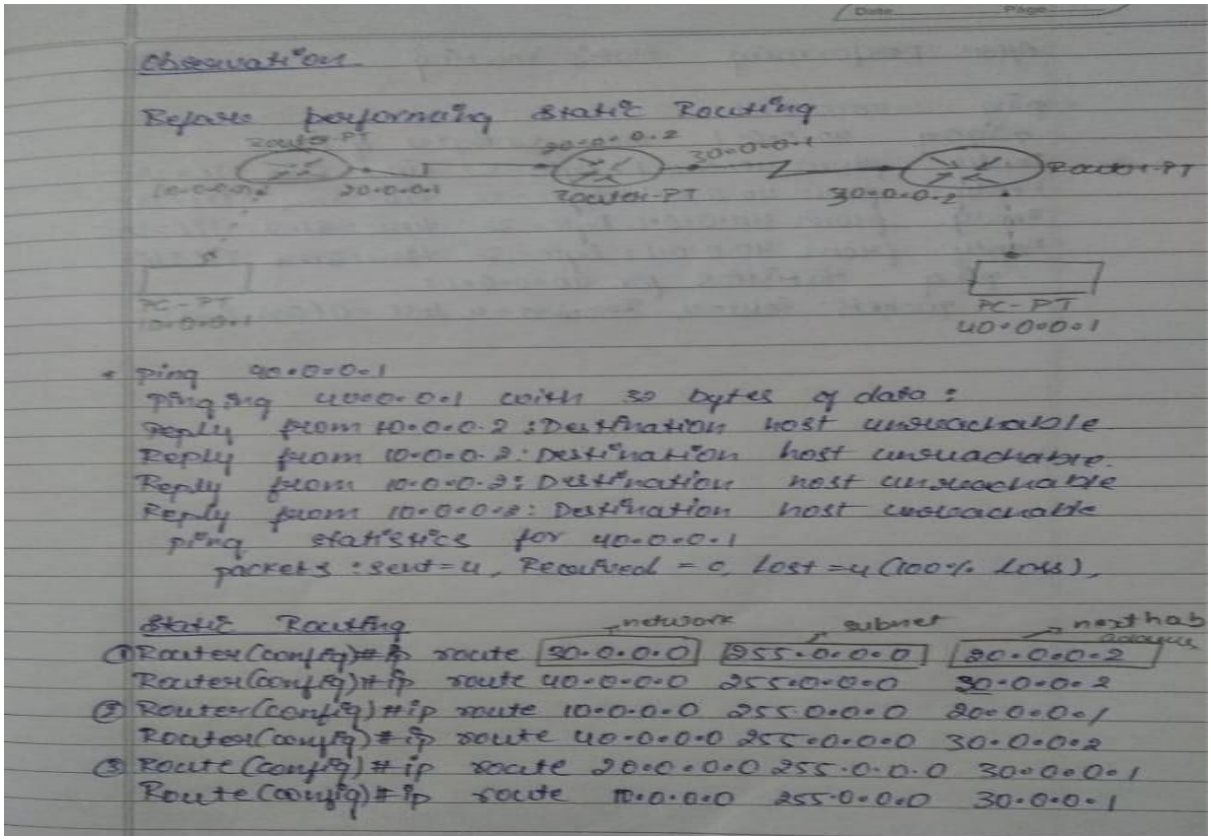


Procedure

- Connect the switches to routers using serial cable
- Connect the routers and PC or any end devices using ~~cross~~ Ethernet cable.
- Set the IP address for the end device whether PC in network 10.0.0.0 and in the network 30.0.0.0.
- Now click on the routers and select CLI

Continue with configuration dialog? [yes/no]: no
Router> enable
Router# config terminal
Enter configuration commands, one per line.
Router(config)# interface fa0/0
Router(config-if)# ip address 10.0.0.2 255.0.0.0
Router(config-if)# no shutdown
Router(config-if)#
%LINK-5-changed: Interface FastEthernet 0/0, changed state to up
%LINEPROTO-5-UPDOWN: line protocol on Interface FastEthernet 0/0, changed state to up.
Router(config)# Interface serial2/0
Router(config-if)# ip address 20.0.0.1 255.0.0.0
Router(config-if)# no shutdown
Router(config-if)#
%LINK-5-changed: Interface Serial2/0, changed state to up.
%LINEPROTO-5-UPDOWN: line protocol on Interface Serial2/0, changed state to up
Router#show ip route

- Repeat the same steps for the rest of all the routers.



Observation

Before performing Static Routing

- ping 30.0.0.1
  Pinging 40.0.0.1 with 32 bytes of data:
  Reply from 10.0.0.2: Destination host unreachable
  Reply from 10.0.0.2: Destination host unreachable.
  Reply from 10.0.0.2: Destination host unreachable
  Reply from 10.0.0.2: Destination host unreachable
  ping statistics for 40.0.0.1
  packets: sent=4, Received = 0, lost = 4 (100% loss),

Static Routing

	network	subnet	next hop address
① Router(config)# ip route	30.0.0.0	255.0.0.0	30.0.0.2
Router(config)# ip route	40.0.0.0	255.0.0.0	30.0.0.2
② Router(config)# ip route	10.0.0.0	255.0.0.0	20.0.0.1
Router(config)# ip route	40.0.0.0	255.0.0.0	30.0.0.2
③ Route(config)# ip route	20.0.0.0	255.0.0.0	30.0.0.1
Route(config)# ip route	10.0.0.0	255.0.0.0	30.0.0.1

SURYA Gold
Date Page

After performing static Routing

* ping 40.0.0.1

pinging 40.0.0.1 with 32 bytes of data:
Reply from 40.0.0.1: byte=32 time=8ms TTL=125
Reply from 40.0.0.1: byte=32 time=8ms TTL=125
Reply from 40.0.0.1: byte=32 time=8ms TTL=125
Reply from 40.0.0.1: byte=32 time=8ms TTL=125

ping statistics for 40.0.0.1:
packets: sent=4, Received=4, lost=0 (0% loss),