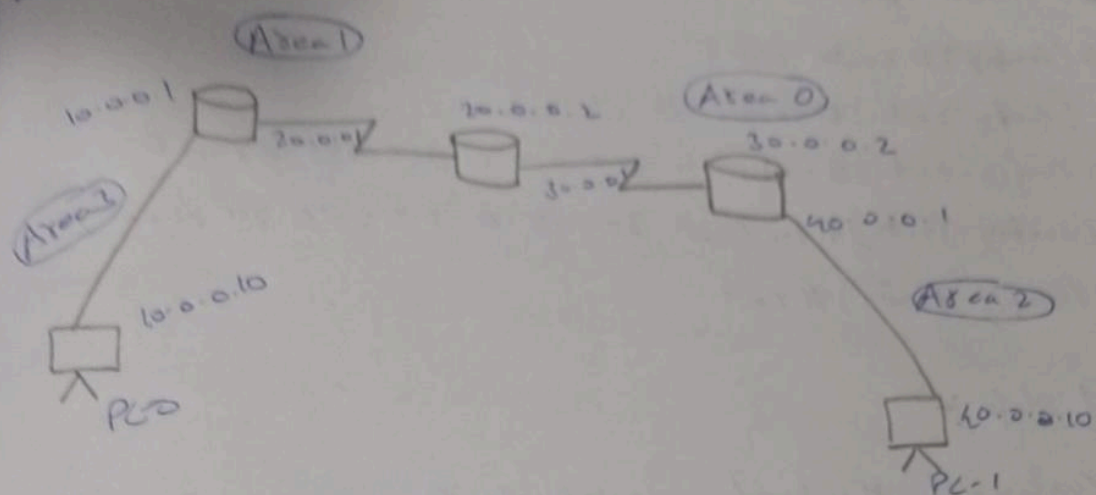


27/7/23

Lab-6



Procedure

- Configure the PC's with IP address & gateway acc to the topology seen above.
- Configure each of the routers with the IP address as given in the topology.
- Encapsulation PPP & clock rate need to be set as done in RIP Protocol Exp.

On Router R1,

```
R1 (config) # router ospf
```

```
R1 (config-router) # router-id 1.1.1.1
```

```
R1 (config-router) # network 20.0.0.0 255.255.255 area 1
```

```
R1 (config-router) # exit
```

On Router R2

```
R2 (config) # router ospf
```

```
R2 (config-router) # router-id 2.2.2.2
```

```
R2 (config-router) # network 20.0.0.0 255.255.255 area 1
```

```
R2 (config-router) # network 30.0.0.0 255.255.255 area 0
```

```
R2 (config-router) # exit
```

In Router, R3
R3 (config) # router ospf 1
R3 (config-router) # router-id 3.3.3.3
R3 (config-router) # network 30.0.0.0 0.255.255.255 area 0
R3 (config-router) # network 10.0.0.0 0.255.255.255 area 2
R3 (config-router) # exit

Next Step :-

R1 (config-if) # interface loopback 0
R1 (config-if) # ip add 172.16.1.255 255.255.0.0
R1 (config-if) # no shutdown

R2 (config-if) # interface loopback 0
R2 (config-if) # ip address 172.16.1.253 255.255.0.0
R2 (config-if) # no shutdown

R3 (config-if) # interface loopback 0
R3 (config-if) # ip address 172.16.1.254 255.255.0.0
R3 (config-if) # no shutdown

Next Step

R1 (config) # router ospf 1
R1 (config-router) # area 1 virtual-link 2.2.2.2
R2 (config) # router ospf 1
R2 (config-router) # area 1 virtual-link 1.1.1.1
R2 (config-router) # exit

Output

Pinging 40.0.0.10 with 32 bytes of data:

Request timed out.

Reply from 40.0.0.10: byte = 32 time = 2ms TTL = 125

Reply from 40.0.0.10: byte = 32 time = 9ms TTL = 125

Reply from 40.0.0.10: byte = 32 time = 10ms TTL = 125.

Ping statistics for 40.0.0.10:

Packets sent = 4, Received = 3, Lost = 1 (25% loss).

Approx round trip times in milliseconds:

Min = 2ms, Max = 10ms, Average = 7ms

live



Key