OSPF with multiple area

Step 1: Design the topology.

Step 2: Give IP addresses to 3 PC, 3 Router(1841) and 3 Switch(2950).

Router 0

Give IP address on fast Ethernet -192.168.1.1

Give IP address on serial 0/0- 10.0.0.1

Router 1

Give IP address on fast Ethernet -192.168.2.1

 Give IP address on serial 0/0- 10.0.0.2

Give IP address on serial 0/0/1- 11.0.0.1

Router 2

Give IP address on fast Ethernet -192.168.3.1

 Give IP address on serial 0/0- 11.0.0.2

PC 0

Give IP address as 192.168.1.2

Set default gateway: 192.168.1.1

PC

Give IP address as 192.168.2.2

Set default gateway: 192.168.2.1

PC 2

Give IP address as 192.168.3.2

Set default gateway: 192.168.3.1

Router 0

Open CLI:

Router (config-if) Exit

Router(config)# router ospf 1

Router (config-router) #network 192.168.1.0 0.0.0.255 area 1

Router (config-router) #network 10.0.0.0 0.255.255.255 area 1

Router (config-router) #exit

Router 1

Open CLI:

Router (config-if) Exit

Router(config)# router ospf2

Router (config-router) #network 192.168.2.0 0.0.0.255 area 0

Router (config-router) #network 10.0.0.0 0.255.255.255 area 1

Router (config-router) #network 11.0.0.0 0.255.255.255 area 2

Router (config-router) #exit

Router 2

Open CLI:

Router (config-if) Exit

Router(config)# router ospf 1

Router (config-router) #network 192.168.3.0 0.0.0.255 area 2

Router (config-router) #network 11.0.0.0 0.255.255.255 area 2

Router (config-router) #exit