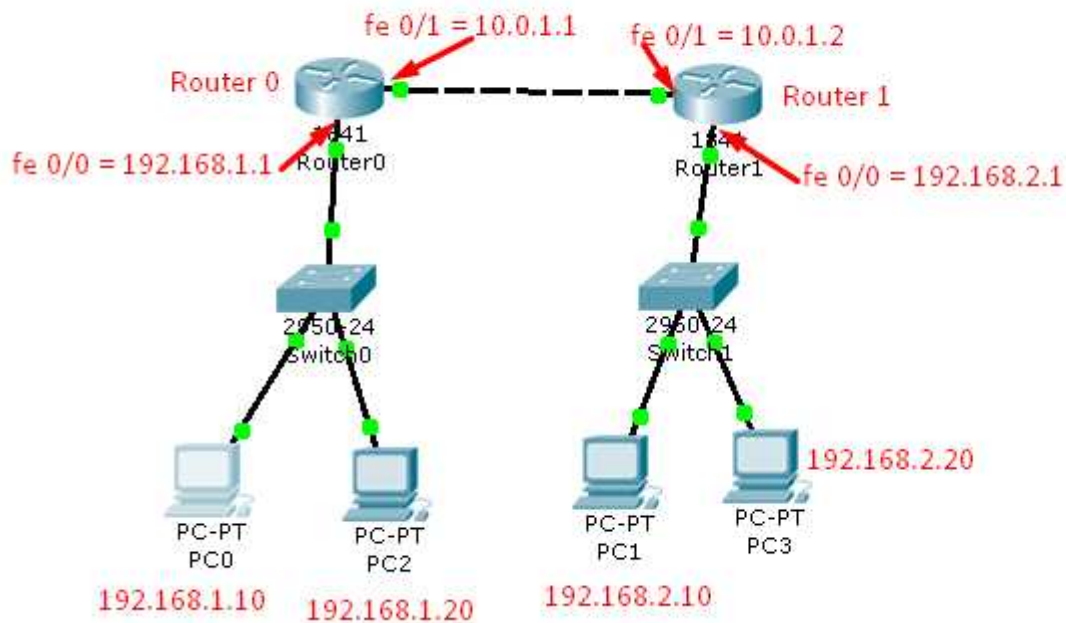


Routing Configuration

- Static routing configuration
- OSPF routing protocol configuration



IP address configuration at Router0

```
Router>enable
Router#configure terminal
Router(config)#interface fastEthernet 0/0
Router(config-if)#ip address 192.168.1.1 255.255.255.0
Router(config-if)#no shutdown
```

Router(config-if)#exit

```
Router(config)#interface fastEthernet 0/1
Router(config-if)#ip address 10.0.1.1 255.255.255.0
Router(config-if)#no shutdown
```

IP address configuration at Router1

```
Router>enable
Router#configure terminal
Router(config)#interface fastEthernet 0/0
Router(config-if)#ip address 192.168.2.1 255.255.255.0
Router(config-if)#no shutdown
```

Router(config-if)#exit

```
Router(config)#interface fastEthernet 0/1
Router(config-if)#ip address 10.0.1.2 255.255.255.0
Router(config-if)#no shutdown
```

Static Routing (SR)

Instead of using routing protocols such as RIP, OSPF, IS-IS etc. routes are added manually.

SR on Router0

```
Router(config)#ip route 192.168.2.0 255.255.255.0 10.0.1.2
```

SR on Router1

```
Router(config)#ip route 192.168.1.0 255.255.255.0 10.0.1.1
```

Open Shortest Path First (OSPF) Routing Protocol

OSPF on Router0

```
Router(config)#router ospf 1
Router(config-router)#network 192.168.2.0 0.0.0.255 area 0
Router(config-router)#network 192.168.1.0 0.0.0.255 area 0
Router(config-router)#network 10.0.1.0 0.0.0.255 area 0
```

OSPF on Router1

```
Router(config)#router ospf 1
Router(config-router)#network 192.168.2.0 0.0.0.255 area 0
Router(config-router)#network 192.168.1.0 0.0.0.255 area 0
Router(config-router)#network 10.0.1.0 0.0.0.255 area 0
```

Here, **1** after OSPF is the process ID of the OSPF Protocol. You can set different process id from "1-65535" for each router.

The **network** command with network ID "**network 192.168.2.0**" is the network identifier, and the "**0.0.0.255**" is the wildcard mask of **192.168.2.0** network. Wildcard mask determine which interfaces to advertise, because OSPF advertise interfaces, not networks.