# Experiment N0:- 8

Aim:- Configure OSPF Using Packet Tracer.

Theory:-

- **OSPF** is nonproprietary link-state routing protocol.
- It is a link-state routing protocol.
- It is an open standard routing protocol described in RFC 2328.
- The SPF algorithm is used to calculate the lowest cost to a destination.
- Routing updates are flooded as topology changes occur.
  # router ospf process-id
  #network net-address wildcard-mask area area-id
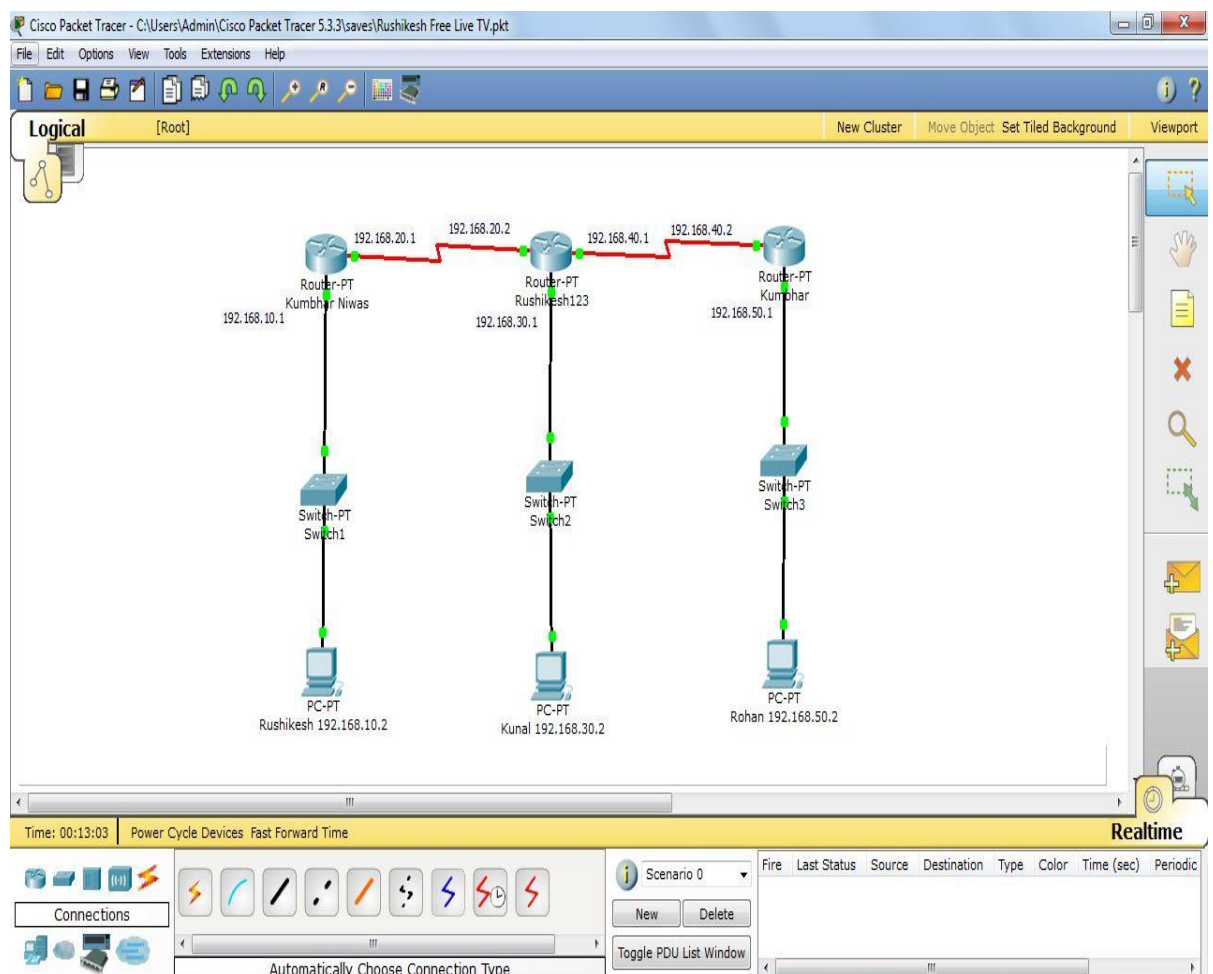
Kumbhar Niwas

- Router>enable
- Router#conf t
- Enter configuration commands, one per line. End with CNTL/Z.
- Router(config)#int s2/0
- Router(config-if)#ip address 192.168.20.1 255.255.255.0
- Router(config-if)#clock rate 64000
- Router(config-if)#no shut
- Router(config-if)#exit
- Router(config)#int fa0/0
- Router(config-if)#ip address 192.168.10.1 255.255.255.0
- Router(config-if)#no shut

Rushikesh123

- Router>enable
- Router#conf t
- Enter configuration commands, one per line. End with CNTL/Z.
- Router(config)#int s2/0
- Router(config-if)#ip address 192.168.20.2 255.255.255.0
- Router(config-if)#no shut
- Router(config-if)#exit
- Router(config)#int s3/0

- Router(config-if)#ip address 192.168.40.1 255.255.255.0
- Router(config-if)#clock rate 64000
- Router(config-if)#no shut
- Router(config)#int fa0/0
- Router(config-if)#ip address 192.168.30.1 255.255.255.0
- Router(config-if)#no shut

Kumbhar

- Router>enable
- Router#conf t
- Enter configuration commands, one per line. End with CNTL/Z.
- Router(config)#int s2/0
- Router(config-if)#ip address 192.168.40.2 255.255.255.0
- Router(config-if)#no shut
- Router(config-if)#exit
- Router(config)#int fa0/0
- Router(config-if)#ip address 192.168.50.1 255.255.255.0
- Router(config-if)#no shut

Routing After Configuration On Kumbhar Niwas

- ➢ Router(config)#router ospf 10
- ➢ Router(config-router)#network 192.168.0.0 0.0.255.255 area 0

OUTPUT:-

- • Router#show ip route

C 192.168.10.0/24 is directly connected, FastEthernet0/0

C 192.168.20.0/24 is directly connected, Serial2/0

O 192.168.30.0/24 [110/782] via 192.168.20.2, 00:02:05, Serial2/0

O 192.168.40.0/24 [110/1562] via 192.168.20.2, 00:02:05, Serial2/0

O 192.168.50.0/24 [110/1563] via 192.168.20.2, 00:00:29, Serial2/0

Routing After Configuration On Rushikesh123

- ➢ Router(config)#router ospf 10
- ➢ Router(config-router)#network 192.168.0.0 0.0.255.255 area 0
- ➢

OUTPUT:-

- Router#show ip route

O 192.168.10.0/24 [110/782] via 192.168.20.1, 00:03:38, Serial2/0

C192.168.20.0/24 is directly connected, Serial2/0

C 192.168.30.0/24 is directly connected, FastEthernet0/0

C 192.168.40.0/24 is directly connected, Serial3/0

O 192.168.50.0/24 [110/782] via 192.168.40.2, 00:02:12, Serial3/0

Routing After Configuration On Kumbhar

- ➢ Router(config)#router ospf 10
- ➢ Router(config-router)#network 192.168.0.0 0.0.255.255 area 0

OUTPUT:-

- Router#show ip route

O 192.168.10.0/24 [110/1563] vía 192.168.40.1, 00:03:06, Serial2/0

O192.168.20.0/24 [110/1562] via 192.168.40.1, 00:03:06, Serial2/0

O 192.168.30.0/24 [110/782] via 192.168.40.1, 00:03:06, Serial2/0

C 192.168.40.0/24 is directly connected, Serial2/0

C 192.168.50.0/24 is directly connected, FastEthernet0/0

Conclusion:- Hence we have Succesfully Implemented and Studied how to Configure OSPF Using Packet Tracer.