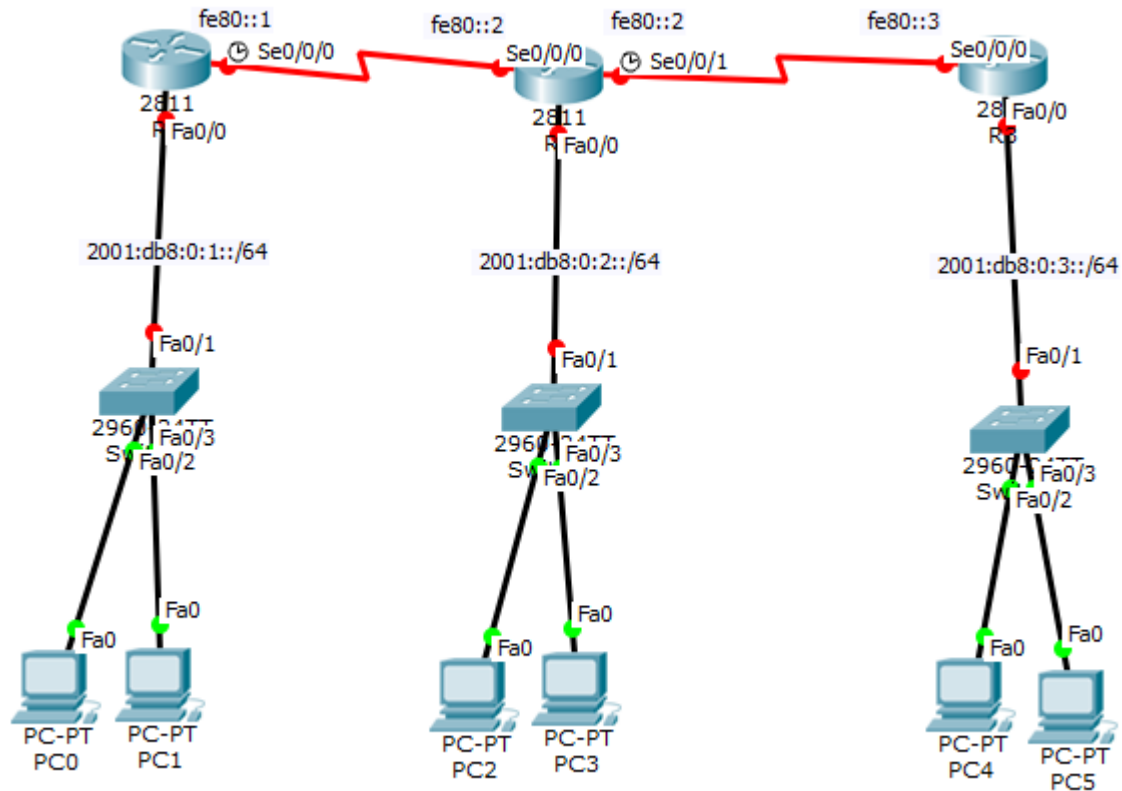# OSPFv3 IPv6 Routing Configuration

IPv6 address configuration in Router R1

```
R1(config)#interface fastEthernet 0/0
R1(config-if)#ipv6 address 2001:db8:0:1::1/64
R1(config-if)#no shutdown

R1(config)#interface serial 0/0/0
R1(config-if)#ipv6 address fe80::1 link-local
R1(config-if)#no shutdown
```

IPv6 address configuration in Router R2

```
R2(config)#interface fastEthernet 0/0
R2(config-if)#ipv6 address 2001:db8:0:2::1/64
R2(config-if)#no shutdown

R2(config)#int serial 0/0/0
R2(config-if)#ipv6 address fe80::2 link-local
R2(config-if)#no shutdown

R2(config)#interface serial 0/0/1
R2(config-if)#ipv6 address fe80::2 link-local
R2(config-if)#no shutdown
```

IPv6 address configuration in Router R3

```
R3(config)#interface fastEthernet 0/0
R3(config-if)#ipv6 address 2001:db8:0:3::1/64
R3(config-if)#no shutdown

R3(config)#interface serial 0/0
R3(config-if)#ipv6 address fe80::3 link-local
R3(config-if)#no shutdown
```

OSPFv3 Configuration on Router R1

OSPFv3 process (OSPFv3 process id 10) and Router ID (Router ID 1.1.1.1) for the OSPFv3 process in the Cisco Router R1.

```
R1(config)#ipv6 unicast-routing
R1(config)#ipv6 router ospf 10
R1(config-rtr)#router-id 1.1.1.1
R1(config)#interface serial 0/0/0
R1(config-if)#ipv6 ospf 10 area 0
R1(config)#interface fastEthernet 0/0
R1(config-if)#ipv6 ospf 10 area 0
```

OSPFv3 Configuration on Router R2

OSPFv3 process (OSPFv3 process id 10) and Router ID (Router ID 2.2.2.2) for the OSPFv3 process in the Cisco Router R2.

```
R2(config)#ipv6 unicast-routing
R2(config)#ipv6 router ospf 10
R2(config-rtr)#router-id 2.2.2.2
R2(config)#interface serial 0/0/0
R2(config-if)#ipv6 ospf 10 area 0
R2(config)#interface serial 0/0/1
R2(config-if)#ipv6 ospf 10 area 0
R2(config)#interface fastEthernet 0/0
R2(config-if)#ipv6 ospf 10 area 0
```

OSPFv3 Configuration on Router R3

OSPFv3 process (OSPFv3 process id 10) and Router ID (Router ID 3.3.3.3) for the OSPFv3 process in the Cisco Router R3.

```
R3(config)#ipv6 unicast-routing
R3(config)#ipv6 router ospf 10
R3(config-rtr)#router-id 3.3.3.3
R3(config)#interface serial 0/0/0
R3(config-if)#ipv6 ospf 10 area 0
R3(config)#interface fastEthernet 0/0
R3(config-if)#ipv6 ospf 10 area 0

R1#show ipv6 route
```