OSPF + IPv6

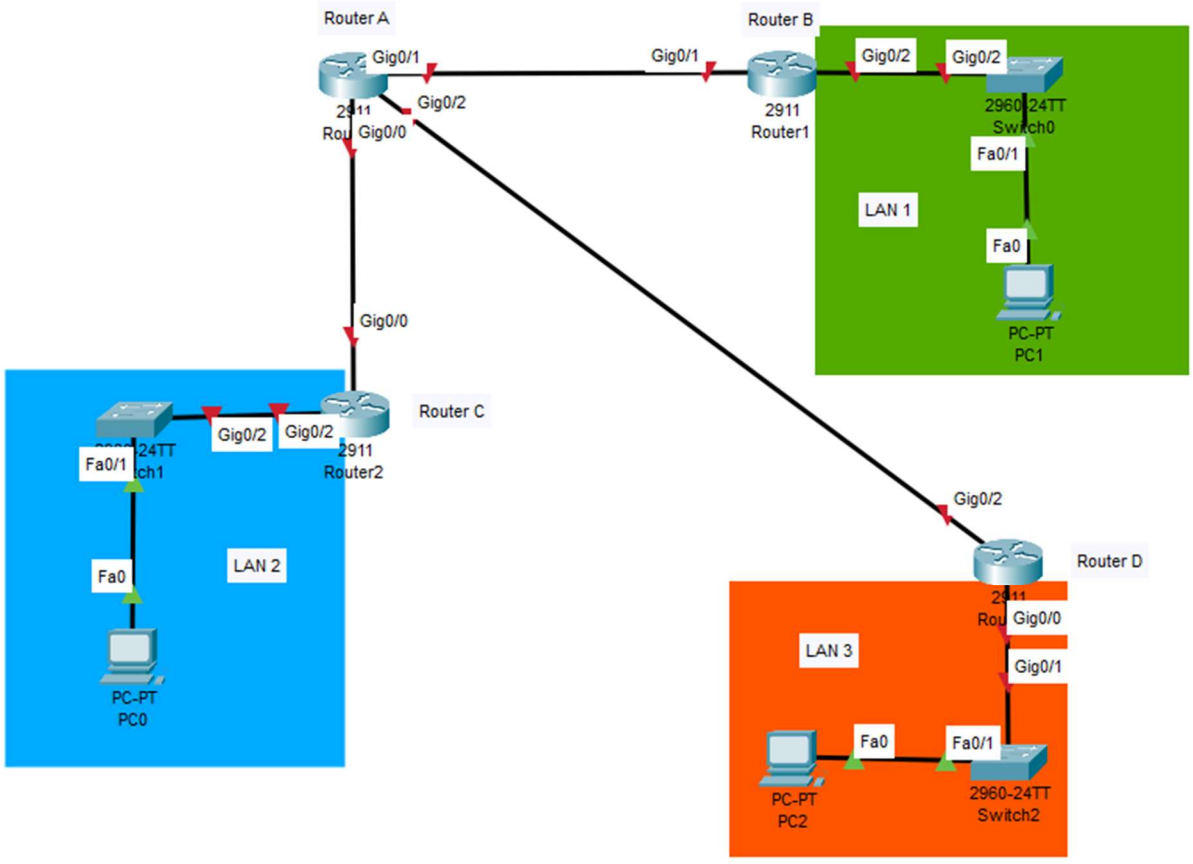
Zařízení:

4x router (2911)

3x switch (2960)

3x PC

Topologie:



Sítě:

- LAN 1: 2001:db8:1::/64
  - Router B: 2001:db8:1::1/64
- LAN 2: 2001:db8:2::/64
  - Router C: 2001:db8:2::1/64
- LAN 3: 2001:db8:3::/64
  - Router D: 2001:db8:3::1/64

- P2P Network A-B: 2001:db8:10:1::/127
    - Router A (Interface Gig0/1): 2001:db8:10:1::1/127
    - Router B (Interface Gig0/1): 2001:db8:10:1::2/127
- P2P Network A-C: 2001:db8:10:2::/127
    - Router A (Interface Gig0/0): 2001:db8:10:2::1/127
    - Router C (Interface Gig0/0): 2001:db8:10:2::2/127
- P2P Network A-D: 2001:db8:10:3::/127
    - Router A (Interface Gig0/2): 2001:db8:10:3::1/127
    - Router D (Interface Gig0/2): 2001:db8:10:3::2/127

OSPF konfigurace

Jako číslo procesu použijeme 1. Všechny routery dáme do oblasti (area) 0, protože naše síť je příliš malá na to, aby se vyplatilo ji dělit. Router ID musí být pokaždé unikátní.

Router A:

```
RouterA> enable
RouterA# configure terminal
RouterA(config)# ipv6 unicast-routing
RouterA(config)# ipv6 router ospf 1
RouterA(config-rtr)# router-id 1.1.1.1
RouterA(config-rtr)# exit
RouterA(config)# interface GigabitEthernet0/0
RouterA(config-if)# ipv6 ospf 1 area 0
RouterA(config-if)# exit
RouterA(config)# interface GigabitEthernet0/1
RouterA(config-if)# ipv6 ospf 1 area 0
RouterA(config-if)# exit
RouterA(config)# interface GigabitEthernet0/2
RouterA(config-if)# ipv6 ospf 1 area 0
RouterA(config-if)# exit
```

Router B:

```
RouterB> enable
RouterB# configure terminal
RouterB(config)# ipv6 unicast-routing
RouterB(config)# ipv6 router ospf 1
RouterB(config-rtr)# router-id 2.2.2.2
RouterB(config-rtr)# exit
RouterB(config)# interface GigabitEthernet0/2
RouterB(config-if)# ipv6 ospf 1 area 0
RouterB(config-if)# exit
RouterB(config)# interface GigabitEthernet0/1
RouterB(config-if)# ipv6 ospf 1 area 0
RouterB(config-if)# exit
RouterB# copy running-config startup-config
```

Router C:

```
RouterC> enable
RouterC# configure terminal
RouterC(config)# ipv6 unicast-routing
RouterC(config)# ipv6 router ospf 1
RouterC(config-rtr)# router-id 3.3.3.3
RouterC(config-rtr)# exit
RouterC(config)# interface GigabitEthernet0/0
RouterC(config-if)# ipv6 ospf 1 area 0
RouterC(config-if)# exit
RouterC(config)# interface GigabitEthernet0/2
RouterC(config-if)# ipv6 ospf 1 area 0
RouterC(config-if)# exit
RouterC# copy running-config startup-config
```

Router D:

```
RouterD> enable
RouterD# configure terminal
RouterD(config)# ipv6 unicast-routing
RouterD(config)# ipv6 router ospf 1
RouterD(config-rtr)# router-id 4.4.4.4
RouterD(config-rtr)# exit
RouterD(config)# interface GigabitEthernet0/0
RouterD(config-if)# ipv6 ospf 1 area 0
RouterD(config-if)# exit
RouterD(config)# interface GigabitEthernet0/2
RouterD(config-if)# ipv6 ospf 1 area 0
RouterD(config-if)# exit
RouterD# copy running-config startup-config
```