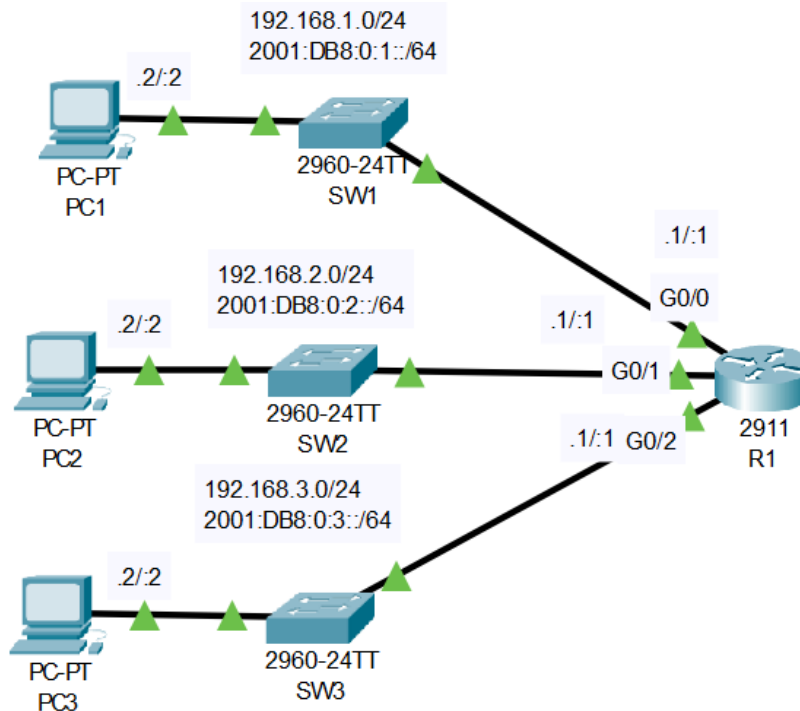


IPv6 part 1

Source: Jeremy's IT Lab

Student: Mono



The IPv4 configuration of each device is complete. Perform the following IPv6 configurations to create an IPv4/IPv6 'dual-stack' network.

1. Enable IPv6 routing on R1.
2. Configure the appropriate IPv6 addresses on R1.
3. Confirm your configurations.
What IPv6 addresses are present on each interface?
4. Configure the appropriate IPv6 addresses on each PC.
Configure the correct default gateway.
5. Attempt to ping between the PCs (IPv4 and IPv6)

1.

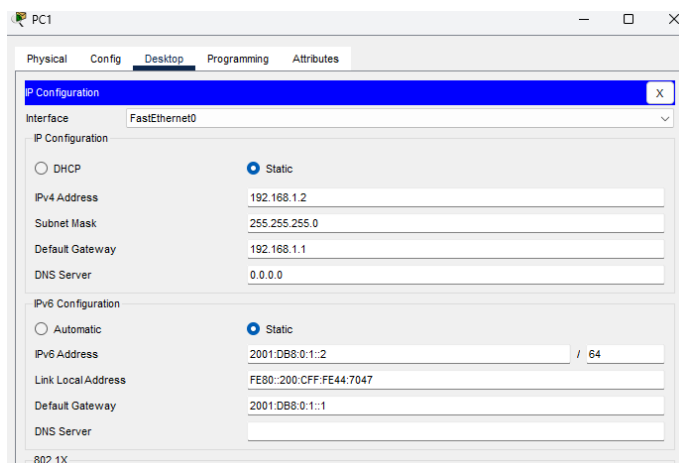
```
R1#config t
Enter configuration commands, one per line. End with CNTL/Z.
R1(config)#ipv6 ?
access-list    Configure access lists
cef            Cisco Express Forwarding
dhcp          Configure IPv6 DHCP
general-prefix Configure a general IPv6 prefix
host          Configure static hostnames
local         Specify local options
nat           NAT-PT Configuration commands
neighbor      Neighbor
route         Configure static routes
router        Enable an IPV6 routing process
unicast-routing Enable unicast routing
R1(config)#ipv6 unicast-routing
R1(config)#
```

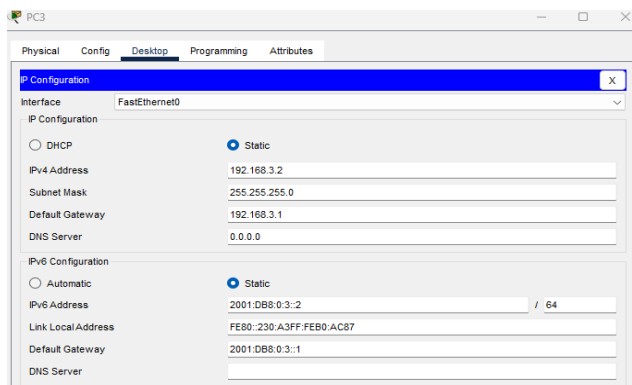
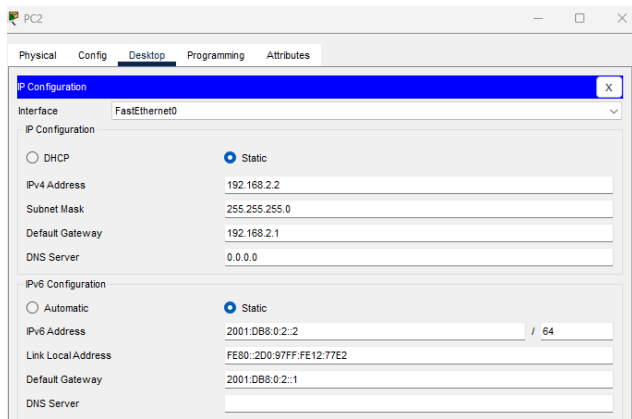
2 + 3.

```
R1(config)#do show ipv6 int bri
GigabitEthernet0/0      [up/up]
    unassigned
GigabitEthernet0/1      [up/up]
    unassigned
GigabitEthernet0/2      [up/up]
    unassigned
Vlan1                   [administratively down/down]
    unassigned
```

```
R1(config)#int g0/0
R1(config-if)#ipv6 addr 2001:DB8:0:1::1/64
R1(config-if)#int g0/1
R1(config-if)#ipv6 addr 2001:DB8:0:2::1/64
R1(config-if)#int g0/2
R1(config-if)#ipv6 addr 2001:DB8:0:3::1/64
R1(config-if)#do show ipv6 int bri
GigabitEthernet0/0      [up/up]
    FE80::201:97FF:FE9A:AC01
    2001:DB8:0:1::1
GigabitEthernet0/1      [up/up]
    FE80::201:97FF:FE9A:AC02
    2001:DB8:0:2::1
GigabitEthernet0/2      [up/up]
    FE80::201:97FF:FE9A:AC03
    2001:DB8:0:3::1
Vlan1                   [administratively down/down]
    unassigned
```

4.





5.

All worked

Example:

