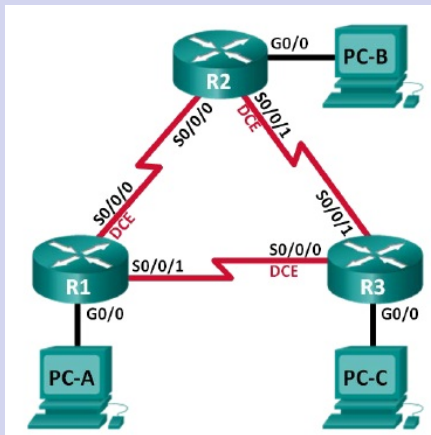## Basic Configuration

| | |
|---|---|
| `Router(config)# hostname R1` | set hostname of Router |
| `Router(config)# no ip domain-lookup` | disable dns lookup |
| `Router(config)# enable secret class` | set password for privileged EXEC mode |
| `Router(config-line)# password cisco` | sets console password |
| `Router(config-line)# login` | enables login |
| `Router(config)# copy run start` | copies running configuration to startup configuration |

## Topology



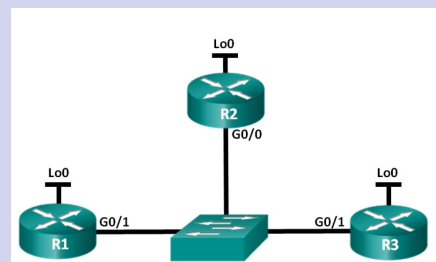Topology for 8.2.4.5 and 10.2.2.3

## Verify OSPF

| | |
|---|---|
| `Router# show ip ospf` | shows all ospf information |
| `Router# show ip ospf neighbor` | shows ospf neighbor routers |
| `Router# show ip route ospf` | verify ospf networks |
| `Router# show ip protocols` | verify ospf configuration |
| `Router# show ip ospf interface` | shows summary of OSPF-enabled interfaces |
| `Router# show ip ospf interface F0/0` | shows ospf information about that interface |

For OSPFv3 add ipv6 to the command: `Router(config)# show ipv6 route ospf`

## Configure OSPF

| | |
|---|---|
| `Router(config)# router ospf 1` | enable ospf with specific process id |
| `Router(config-router)# network 192.168.1.0 0.0.0.255 area 0` | configure network with area id 0 |
| `Router(config-router)# router-id 1.1.1.1` | set router id manually |
| `Router(config-router)# auto-cost reference-bandwith 10000` | change default reference bandwith |
| `Router(config)# clear ip ospf process` | clears ospf to refresh everything (f.e after set router-id) |
| `Router(config)# passive-interface F0/0` | routing updates won't send on that interface |
| `Router(config)# no-passive-interface F0/0` | router will send OSPF routing updates on that interface |
| `Router(config-if)# ip ospf cost 1565` | set cost on a interface |
| `Router(config-if)# ip ospf priority 255` | configure interface with ospf priority |
| `Router(config-if)# ip ospf priority 0` | router can not be become DR or BDR |

## Topology



Topology for 10.1.1.13