

## # OSPFv2 Configuration - Packet Tracer Lab

This file contains the complete OSPFv2 configuration commands used in the **Point-to-Point Single-Area OSPFv2 Configuration Lab**. It includes **interface setup, OSPF network configuration, router IDs, passive interfaces, and verification commands**.

### ## **♦ Router R1 Configuration**

```

enable

configure terminal

hostname R1

interface g0/0/0

ip address 192.168.10.1 255.255.255.0

no shutdown

exit

interface s0/1/0

ip address 10.1.1.1 255.255.255.252

no shutdown

exit

interface s0/1/1

ip address 10.1.1.5 255.255.255.252

no shutdown

exit

router ospf 10

```
router-id 1.1.1.1

network 192.168.10.0 0.0.0.255 area 0

network 10.1.1.0 0.0.0.3 area 0

network 10.1.1.4 0.0.0.3 area 0

passive-interface g0/0/0

exit

` ``
```

## \*\* ♦ Router R2 Configuration\*\*

```
` ``

enable

configure terminal

hostname R2


interface g0/0/0

ip address 192.168.20.1 255.255.255.0

no shutdown

exit


interface s0/1/0

ip address 10.1.1.2 255.255.255.252

no shutdown

exit


interface s0/1/1

ip address 10.1.1.9 255.255.255.252

no shutdown

exit
```

```
router ospf 10
router-id 2.2.2.2
network 192.168.20.0 0.0.0.255 area 0
network 10.1.1.2 0.0.0.3 area 0
network 10.1.1.8 0.0.0.3 area 0
passive-interface g0/0/0
exit
` ``
```

## \*\* ♦ Router R3 Configuration\*\*

`` `

```
enable
configure terminal
hostname R3

interface g0/0/0
ip address 192.168.30.1 255.255.255.0
no shutdown
exit
```

```
interface s0/1/0
ip address 10.1.1.10 255.255.255.252
no shutdown
exit
```

```
interface s0/1/1
ip address 10.1.1.6 255.255.255.252
```

```
no shutdown
```

```
exit
```

```
router ospf 10
```

```
router-id 3.3.3.3
```

```
network 192.168.30.0 0.0.0.255 area 0
```

```
network 10.1.1.10 0.0.0.3 area 0
```

```
network 10.1.1.6 0.0.0.3 area 0
```

```
passive-interface g0/0/0
```

```
exit
```

```
` ``
```

## ## \*\* 💡 OSPF Verification Commands\*\*

To confirm that OSPF is configured and working correctly, use the following commands:

```
` ``
```

```
show ip ospf neighbor
```

```
show ip route ospf
```


```
show ip protocols
```

```
` ``
```

## ## \*\* ✅ Summary\*\*

This configuration ensures that:

- \*\*All routers have OSPFv2 enabled\*\* with correct Router IDs.
- \*\*Network statements cover all required interfaces\*\* for OSPF routing.
- \*\*Passive interfaces prevent unnecessary OSPF traffic\*\* on LAN interfaces.
- \*\*Connectivity is verified using OSPF commands.\*\*

 \*\*Upload this file to GitHub to document your OSPF lab setup!\*\*