

# VLAN 3 Networks

**3 Networks 1 switch 1 Router**

**in Pc assign gateway and Ip address**

**in switch create an 3 vlan and add ports**

```
interface fa0/1
switchport mode access
switchport access vlan 10
```

**in router no sh for port**

then enter these commands for each vlan:

```
interface GigabitEthernet 0/0.10
encapsulation dot1Q 10
ip address 192.168.1.5 255.255.255.0
192 is gateway
```

Router : Router pt

Switch : 2950 24

## RIP

### RIP

2 router

2 switch

4 pc

switch nothing 2950-24

Router :

no sh all interfaces

**router rip**

Router to Router interface

```
interface Serial2/0
```

network 192.168.2.0 now:next router change according to it

```
network 10.0.0.0
```

Assign ip to serial

```
interface Serial2/0  
ip address 10.0.0.2 255.0.0.0  
2 replace with 3 in next router
```

Assign ip to interface

```
interface fastEthernet 0/0  
ip address 192.168.2.1 255.255.255.0
```

## **OSPF**

OSPF

assign gateway and ip to pc

command : router rip

in router ip add all networks in topologies:

commands :

```
network 192.168.2.1  
network 192.168.1.1  
network 192.168.3.1  
network 10.0.0.0  
network 20.0.0.0
```

in 3 routers we need three networks

```
10.0.0.0  
20.0.0.0  
30.0.0.0
```

assing ip all interfacs in router

commands:

```
interface Serial2/0  
ip address 10.0.0.9 255.0.0.0
```

## OSPF

commands

```
router ospf 1
```

```
network 10.0.0.0 0.255.255.255 area 0
```

```
network 192.168.1.0 0.0.0.255 area 0
```

Like that add all networks in subnet mask replace binary 0 with 1 and 1 with 0