Routing Information Protocol (RIP) configuration

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FAST, Peshawar

RIP

- Routing Information Protocol
- It is a dynamic routing protocol
- In dynamic routing protocol it comes under the category of Distance vector routing protocol
- Distance metric is hop count
- Maximum hop count is 15 (routers)
- RIPv1 only supports classful IP addressing (Default subnets only)
- RIPv2 supports classless IP addressing (subnetting)
- RIP broadcasts its routing table every 30 secs

Consider the network in Fig 1.

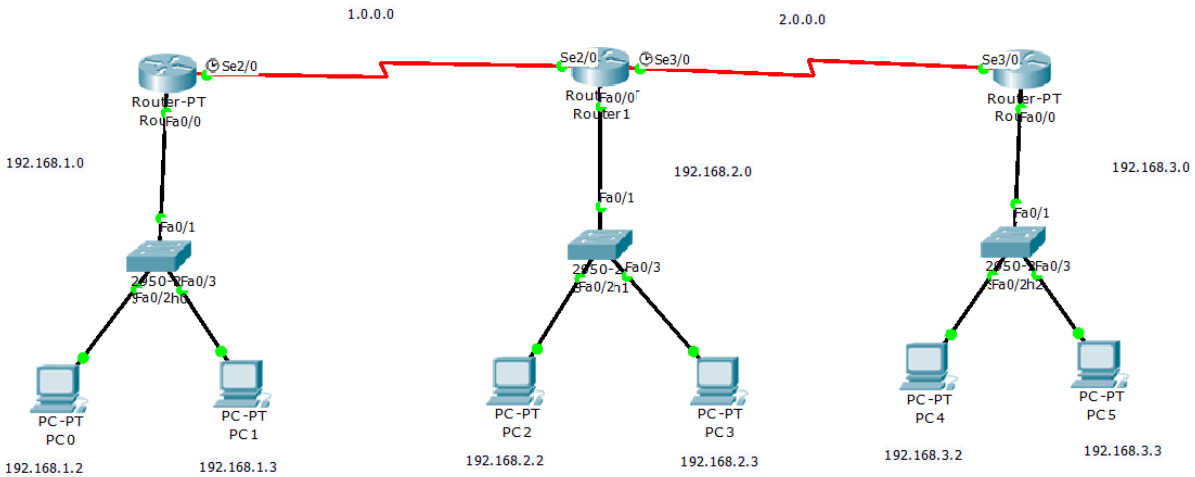

Figure 1: Three routers network

Router-0 Configuration

```
Router>
Router>en
Router#conf t
Router(config)#hostname Router0
Router0(config)#router rip
Router0(config-router)#network 192.168.1.0
Router0(config-router)#network 1.0.0.0
Router0(config-router)#version 2
Router0(config-router)#exit
Router0(config)#exit
Router0#sh ip route
Router0#sh running-config
Router0#copy running-config startup-config
```

Router-1 Configuration

```
Router>
Router>en
Router#conf t
Router(config)#hostname Router1
Router1(config)#router rip
Router1(config-router)#network 192.168.2.0
Router1(config-router)#network 1.0.0.0
Router1(config-router)#network 2.0.0.0
Router1(config-router)#version 2
Router1(config-router)#exit
Router1(config)#exit
Router1#sh ip route
Router1#sh running-config
Router1#copy running-config startup-config
```

Router-2 Configuration

```
Router>
Router>en
Router#conf t
Router(config)#hostname Router2
Router2(config)#router rip
Router2(config-router)#network 192.168.3.0
Router2(config-router)#network 2.0.0.0
Router2(config-router)#version 2
Router2(config-router)#exit
Router2(config)#exit
Router2#sh ip route
Router2#sh running-config
```

```
Router2#copy running-config startup-config
```