

# **RIP Version 1 Network Topology and Configuration**

## 1. Network Topology Overview

- Mumbai Team A (192.10.1.0/24):
  - Devices: PCs, Printer, and Laptop.
  - Switch: 2960-24TT.
  - IP Address Scheme:
    - PCs: 192.10.1.10, 192.10.1.20, 192.10.1.30, 192.10.1.40
    - Printer: 192.10.1.60Laptop: 192.10.1.50
  - Router0: Connected to network 192.10.1.0/24 and other networks using RIP.
- Pune Team B (192.10.2.0/24):
  - Devices: PCs, Printer, and Laptop.
  - Switch: 2960-24TT.
  - IP Address Scheme:
    - PCs: 192.10.2.10, 192.10.2.20, 192.10.2.30, 192.10.2.40
    - Printer: 192.10.2.60
    - Laptop: 192.10.2.50
  - Router3: Connected to network 192.10.2.0/24 and other networks using RIP.

## 2. RIP Configuration on Routers

## Router0: Commands used:

Router(config)#router rip

Router(config-router)#version 2

Router(config-router)#network 192.10.1.0

Router(config-router)#network 192.10.3.0

Router(config-router)#exit

Router(config)# do show ip route rip

Networks included in RIP: 192.10.1.0/24 and 192.10.3.0/24.

#### Router1: Commands used:

Router(config)#router rip

Router(config-router)#version 2

Router(config-router)#network 192.10.3.0

Router(config-router)#network 192.10.5.0

Router(config-router)#exit

Networks included in RIP: 192.10.3.0/24 and 192.10.5.0/24.

## \* Router2: Commands used:

Router(config)#router rip

Router(config-router)#version 2

Router(config-router)#network 192.10.5.0

Router(config-router)#network 192.10.4.0

Router(config-router)#exit

Networks included in RIP: 192.10.5.0/24 and 192.10.4.0/24.

## \* Router3: Commands used:

Router(config)#router rip

Router(config-router)#version 2

Router(config-router)#network 192.10.4.0

Router(config-router)#network 192.10.2.0

Router(config-router)#exit

Networks included in RIP: 192.10.4.0/24 and 192.10.2.0/24.

## 3. RIP Version 2 Information

RIP Version 2 provides additional features compared to Version 1, such as subnet mask awareness and authentication.

Router(config-router)#version 2

## 4. External Network Connections

Cloud Networks:

- "Other Network Like Delhi" and "Other Network Like Nagpur" represent external networks possibly connected to Routers 1 and 2 respectively, but these are not detailed in the current topology.

## 5. Summary of Subnetting

Subnetting Information:

- 192.10.1.0/24: Assigned to Mumbai Team A.
- 192.10.2.0/24: Assigned to Pune Team B.
- 192.10.3.0/24: Link between Router0 and Router1.
- 192.10.4.0/24: Link between Router1 and Router2.
- 192.10.5.0/24: Link between Router2 and Router3.