

Assignment - B8

- # Problem Statement: Configure RIP/OSPF/BGP using Packet Tracer.
- # Objective → To configure protocols like RIP using Packet Tracer.
- # Requirements: Cisco Packet Tracer, RIP Protocol.
- # Theory

- Routing Protocols:

Routing Protocols maintains routing tables where routing table contains a route to every destination network.

→ Dynamic Routing Protocols.

Types of it are

- ① Routing Information Protocol (RIP).
- ② Open Shortest Path Finder (OSPF)
- ③ Border Gateway Protocol (BGP)

RIP Working

↳ RIP constructs its routing Table using

the information it receives from other routers. The best router changes its routing table in response to routing updates that provide additional information or notifications that conditions in the network have changed.

→ Protocol must dictate parameters such as following:

- 1) How routers compute a router's metric & select the best route
- 2) What info routers include in updates
- 3) Which routers & router interfaces send & receive updates
- 4) When routers send & receive updates

Steps to configure RIP using Packet Tracer.

- 1) Set up 2 end devices & 2 switches
- 2) Wire router to connect PC1 to switch & switch to router
- 3) Similarly connect PC2 to router & switch
- 4) Connect serial ports of router 0 to 1
- 5) Provide IP address to both PC & also to ethernet port & serial port also.
- 6) Go to CMD of PC0 & ping the IP of PC2.

- 7) Provide the gateway to PC0 & PC1 in config table
- 8) In RIP section of routers 0, add 3 networks in routing protocol
- 9) Add 3 networks in RIP section of router 1.
- 10) Reply from PC0 to PC1

Conclusion

I have configured RIP using Packet Tracer and pinged across and verified in real time mode & simulation mode.