



Experiment 6

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UID:

Branch: BE-CSE

Section/Group:

Semester: 5th

Date of Performance:

Subject Name: Computer Networks

Subject Code: 22CSH-312

1. Aim: Configure a network using any Routing Protocol such as Distance Vector routing or Link State Routing Protocol using Packet Tracer or NS2

2. Objective:

- Set up basic IP addressing for the network.
- Enable a routing protocol (RIP for Distance Vector or OSPF for Link State) on the routers.

3. Requirements:

- Packet Tracer.
- Router
- Switch
- Wire

4. Procedure:

- Connect devices to the switch, and router in packet tracer.
- Assign IP addresses to each device.
- Configure RIP Routing on Routers.
- Check device communication via the router 1 and router 2.
- Select a source and destination device
- Drag and drop a packet from the source to the destination
- Switch to Simulation mode in Packet Tracer.
- Click "Capture/Play" to start the simulation.

5. Output:

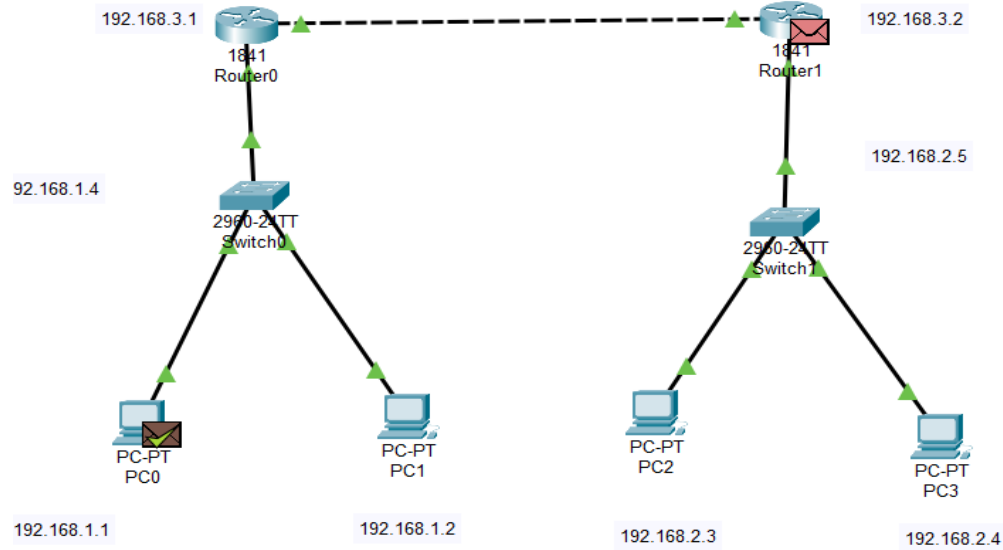


Fig 1: dynamic routing through RIP

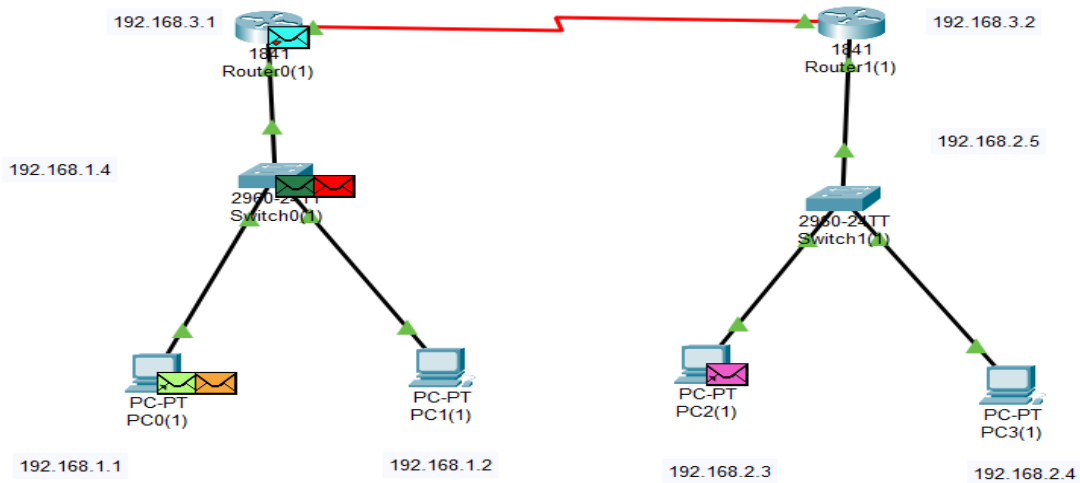


Fig 2: Dynamic routing through serial cable



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6. Learning Outcomes:

- a. Learn the difference between Distance Vector (RIP) and Link State (OSPF) routing protocols.
- b. Gain hands-on experience in configuring and managing routing protocols on Cisco routers using Packet Tracer.
- c. Develop skills in designing, configuring, and troubleshooting networks with multiple subnets and routers.