

Aim:

a) Simulate Static Routing Configuration using CISCO Packet Tracer.

b) Simulate RIP using CISCO packet tracer

(a) 1. Adding Static Routes: each router knows only the network directly connected to it. add static route to reach to network not directly connected.

Eg: Router 0, networks 10.0.0.0/8, 20.0.0.0/8, & 40.0.0.0/8 are directly connected but 30.0.0.0/8, 50.0.0.0/8

2. Creating main Backup Routes Administrative distance decides preference of router: the lower the AP, the higher the Preference

3. Router configurations:

Configure static routes on each router for network not directly connected.

4. ~~Verifying~~ Router:

Verify routes by using commands show ip route Static.

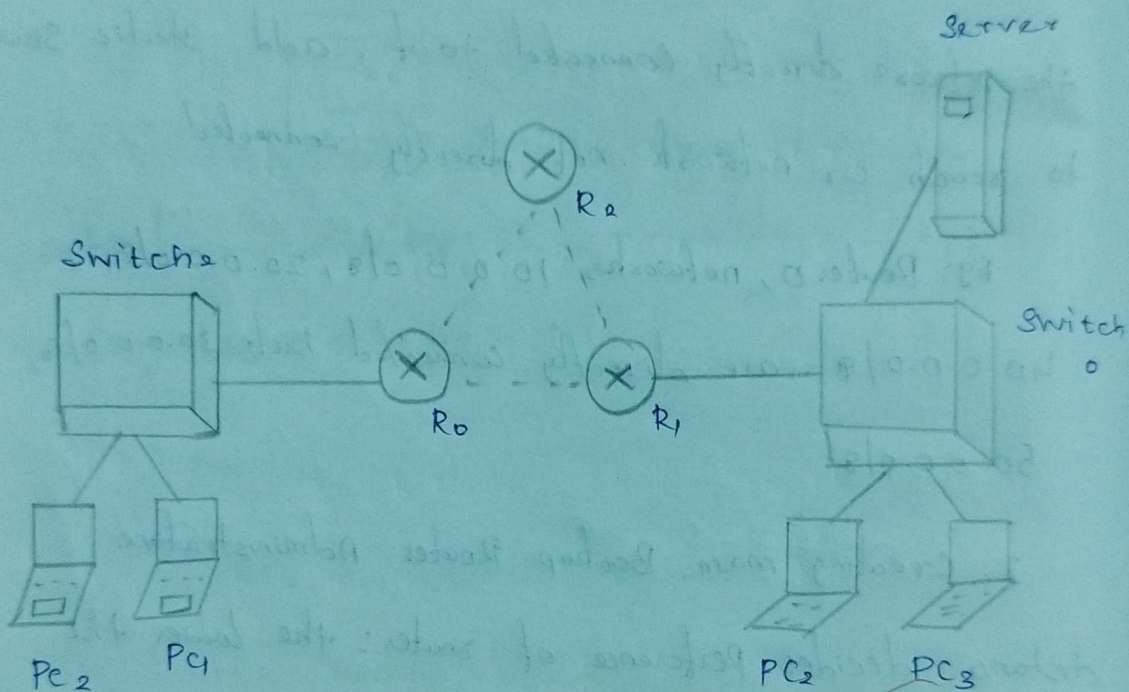
### 5. Testing Route Fail over.

↳ Test connectivity using ping from a device on a connected network

↳ disconnect or "break" the link on the main route

### 6. deleting a static Route

Show IP route static

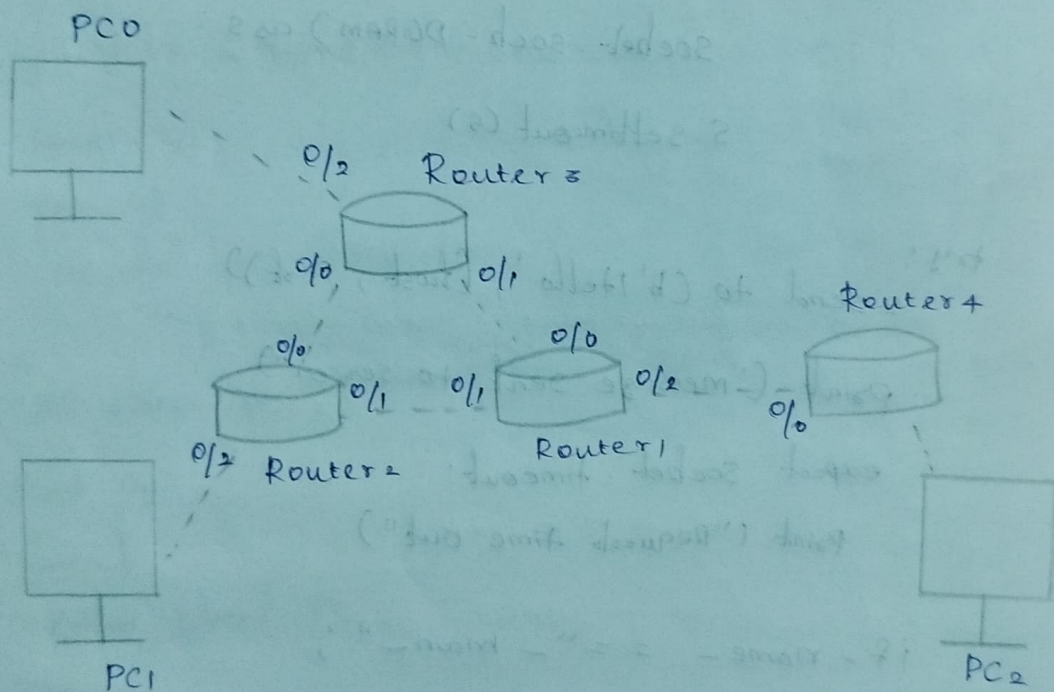




b,

1. Initial IP configuration for devices
2. Assign IP addresses to device for PCs & routers
3. enable, configure, interface on router
4. Configure RIP on router
5. verify and test redundancy
  - use ping command on PC1
  - use tracer to RIP redirecting

traffic through an alternate route



Result:

Thus RIP is simulated using Cisco Packet

Tester Successfully

*[Signature]*