

Date: 22/10/24

Aim:

a) simulate the static routing configuration using Cisco packet tracer.

b) simulate RIP using Cisco packet tracer.

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

Eg: Router 0, networks 10.0.0.0/3, 20.0.0.0/3, 40.0.0.0/3 are directly connected, but 30.0.0.0/3, 50.0.0.0/8.

2) creating Main & backup routes.

Administrative distance decides preference of routes, the lower the AD, the higher the preference.

3) Router configuration:

configure static routes on each router for networks not directly connected.

4) verifying router:

verify routes by using command show ip route static.

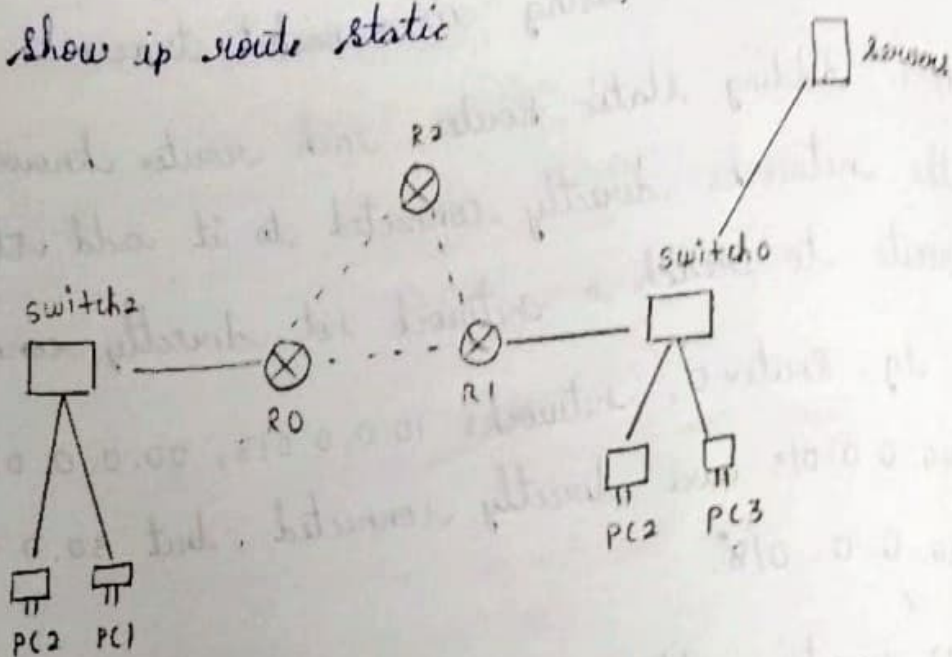
5) Testing Route fail over:

→ Test connectivity using traceroute or ping from a device on a connected network

→ Is connect 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 Address to devices for PCs & router.

(3) Enable configure interfaces on Router

(4) configure Rip on Routers.

5) verify and Test redundancy.

- use ping command on PC1

• use traceroute to see rip redirecting

traffic through an alternate route.

Result:

Thus the program is successfully executed & the output is verified.

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