



Aim:

- (a) Simulate Static Routing Configurations using Cisco Packet Tracer
- (b) Simulate RIP using Cisco Packet Tracer

(c)

- (i) Adding Static Routes: each other routers know only the networks directly connected to it. add static route to reach a network not directly connected.

Eg: Router0, 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 are not directly connected

- (ii) Creating main & backup routes:

Administrative Distance decides preference of routes: the lower the AD, the higher the preference

- (iii) Router Configurations:

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

- (iv) Verifying Routes:

Verify routes by using commands.  
show ip route static.

- (v) Testing route fail over:

Test connectivity using tracer or ping from a device on a connected network and is connected or break the link on the main route

vi. Deleting a static route  
 show ip route static

CA)

a) Initial IP Configuration for devices

b) Assign IP Address to device for PC & router

c) Enable Configure interfaces on router

d) Configure RIP on routers

e) Verify and test redundancy

- use ping Command on PC

- use tracer to see rip redirecting traffic  
 Through an alternate route.

Result:

Thus the Configuration for Simulate Static routing  
 Using Cisco and Simulate RIP using Cisco has been  
 Successfully executed and output is Verified