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11 Routing of network layer using CISCO

Aim- Stimulate static Routing configuration using CISCO packet tracer.

Procedure

1) Setting up a practice lab.

Create a packet tracer lab with initial Configuration.

2) Creating, adding, verifying static route.

Routers automatically learn those connected networks. We only need to add routes for the network that are not available or to routers in other cases.

Router 1 requirements

Create two routes for network 30.0.0.0/8 and configure the first route as the main route and the second route.

Router 1 requirement

Create two routes for network 10.0.0.0/8 and configure first route as main route and second route as backup route.

Router 2 requirements

Create static routes for network 10.0.0.0/8 and network 30.0.0.0/8 and verify the routes by adding both routes.

Verify static routing

1. By sending ping request

2. By testing the routing table entries



b) Now we have to start configuration.

Aim

To stimulate RIP using Cisco packet tracer

Assign IP address to PCs

Double click PCs and click desktop menu item and click IP configuration.

Assign IP address to interface of Router

Double click Router 0 and click CLI and press enter key to access the command prompt of Router.

Configure RIP routing protocol

Configuration of RIP protocol is much easier than you think. It requires only two steps to configure the RIP routing.

Enable RIP routing protocol is much easier than you think from global configuration mode.

Tell RIP routing protocol which networks you want to advertise.

Command prompt

packet tracer DC command like 1-0

DC > ip config

Fast Ethernet 0 connection (Default port)

Link local IPv6 Address ::1:260:70F8

IP address 10.0.0.2

Subnet mask ::ffff:ffff:ffff:ffff

Default Gateway --- 20.0.0.1

PC > ping 10.0.0.2

pinging 10.0.0.2 with 32 bytes of data

Request timed out.

Request timed out (from PC) (from PC)

(from PC) (from PC)

Result

The static routing configuration using Cisco packet tracer has been executed successfully.

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