EX.NO:10

DESIGN A SIMPLE TOPOLOGY USING CISCO PACKET TRACER

AIM:

   To design and configure a simple network topolody consisting of one router,two switches,and multiple PCs using cisco packet Tracer,enabling communication between PCs on different switches.
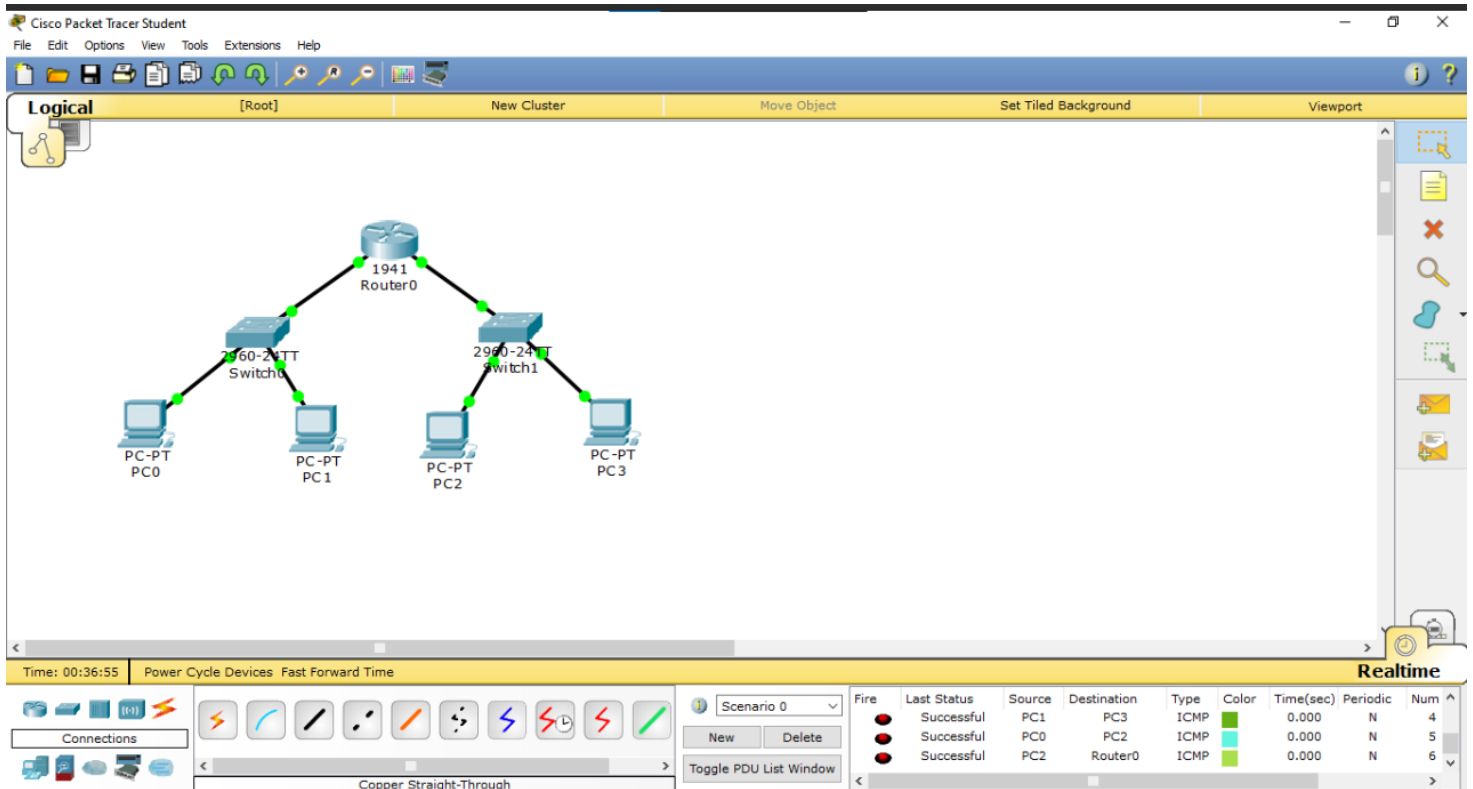
TOPOLOGY DESIGN:

- Connect the router's interface to both switches (usually via
- FastEthernet ports).
- Connect PCs to the switches via Ethernet cables.
- Assign IP addresses and subnet masks to each PC.
- Configure router interfaces with appropriate IP addresses to act as gateways.
- Enable communication between PCs by configuring routing on the router.

CONFIGURATION STEPS:

1. Place devices: 1 router, 2 switches, PCs.

2. Connect devices:

- Router Fa0/0 → Switch1
- Router Fa0/1 → Switch2
- PCS->respective switches

3.Assign IP addresses to PCs and router interfaces(ensure they

   Are in the correct subnet).

4.Configure PCs with default gateway pointing to the router

   Interface IP.

5.Enable interfaces on the router(no shutdown).

6.Test connectivity using ping between PCs on the same and

Different switches.

OUTPUT:

RESULT:

Succeessfully configured a simple LAN topology enabling PCs connected to different switches to communicate via the router.

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