

WORKSHEET – 3.3

Name:

Section/Group:

UID:

Subject: Computer Networks Lab

Date of Submission: 6.5.2022

Branch: BE CSE (4th Semester)

Aim:

To show TCP/IP Protocol.

Objective:

Understand how to assign IP address to computer.

Requirements:

Cisco Packet Tracer

Generic Router

Switch End

Devices.

Steps:

Step 1: Create a system using routers, switches and different end devices.

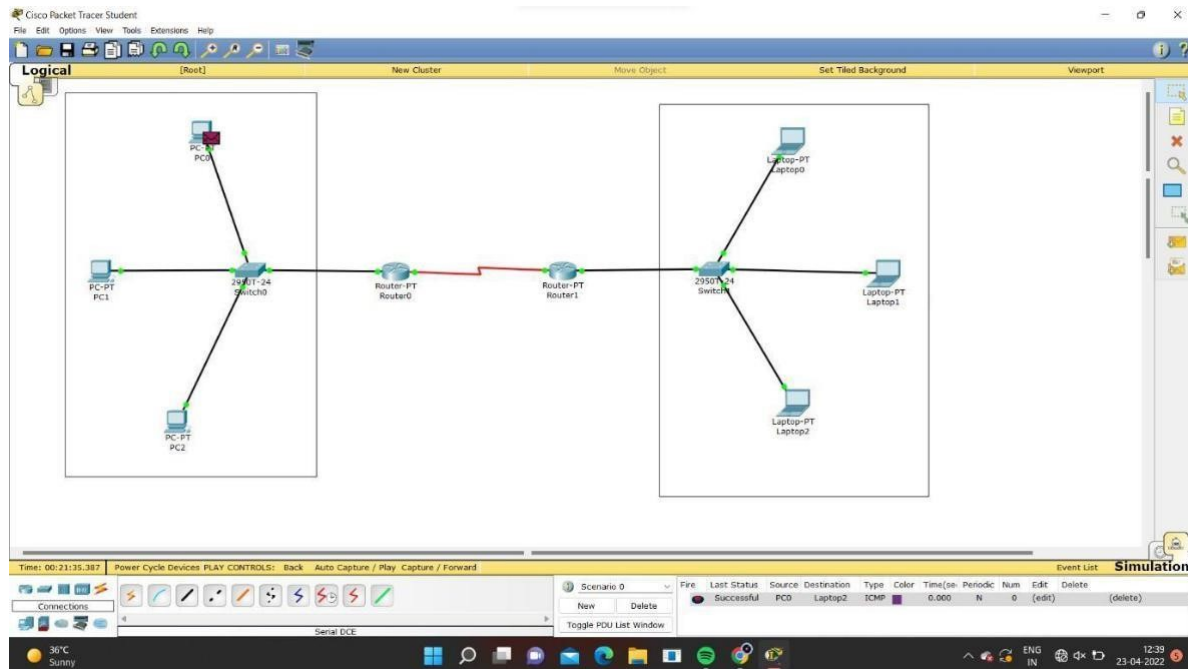
Step 2: Connect all the end- devices with switch.

Step 3: Connect router with each other.

Step 4: Assign IPs to all devices.

Step 5: Drop Packet and start simulation.

Connection:



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The screenshot shows a network simulation in Cisco Packet Tracer. The topology consists of two switches (2950T-24) connected to two routers (2950T-24). The left switch is connected to three PCs (PC1, PC2, PC3), and the right switch is connected to two laptops (Laptop1, Laptop2). The routers are connected in a line between the two switches. The simulation panel on the right shows an event list with the following data:

Vis.	Time(sec)	Last Devi	At Devi	Type	Info
0.000	--	PC0	Switch0	ICMP	
0.001		PC0	Switch0	ICMP	
0.002		Switch0	Router0	ICMP	
0.003		Router0	Router1	ICMP	
0.004		Router1	Switch1	ICMP	
0.005		Switch1	Laptop2	ICMP	
0.006		Laptop2	Switch1	ICMP	

This screenshot shows the same network topology as the first image. The simulation panel on the right shows a different event list:

Vis.	Time(sec)	Last Devi	At Devi	Type	Info
0.002		Switch0	Router0	ICMP	
0.003		Router0	Router1	ICMP	
0.004		Router1	Switch1	ICMP	
0.005		Switch1	Laptop2	ICMP	
0.006		Laptop2	Switch1	ICMP	
0.007		Switch1	Router1	ICMP	
0.008		Router1	Router0	ICMP	

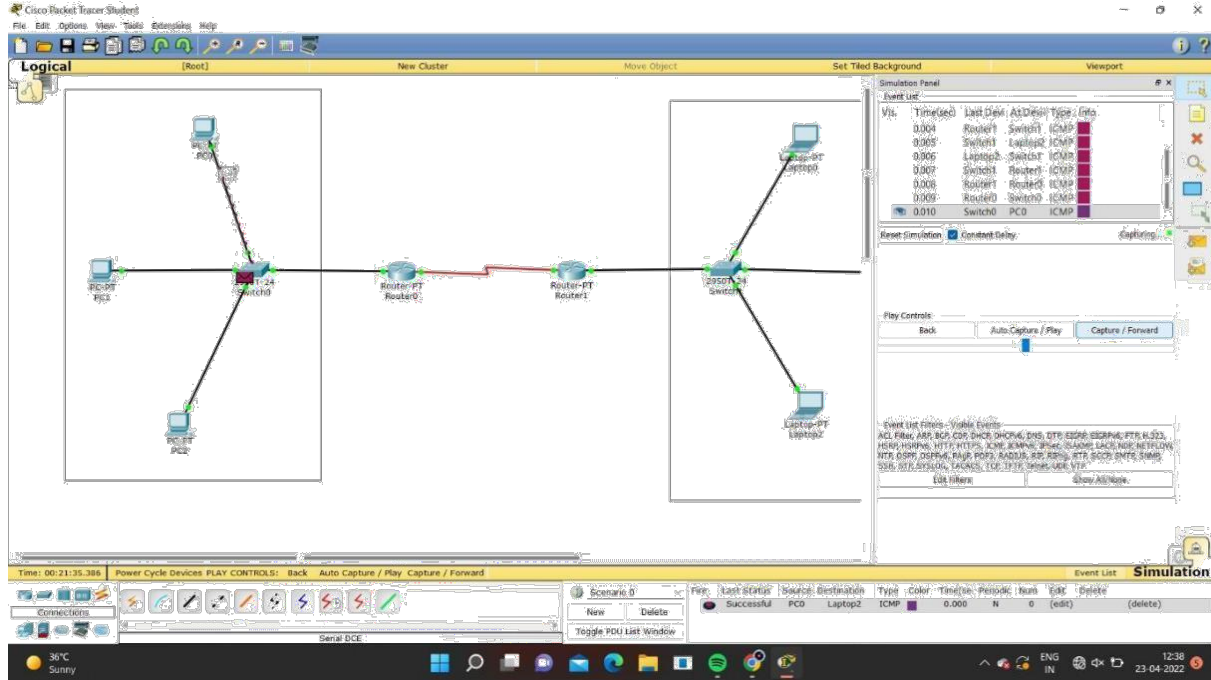


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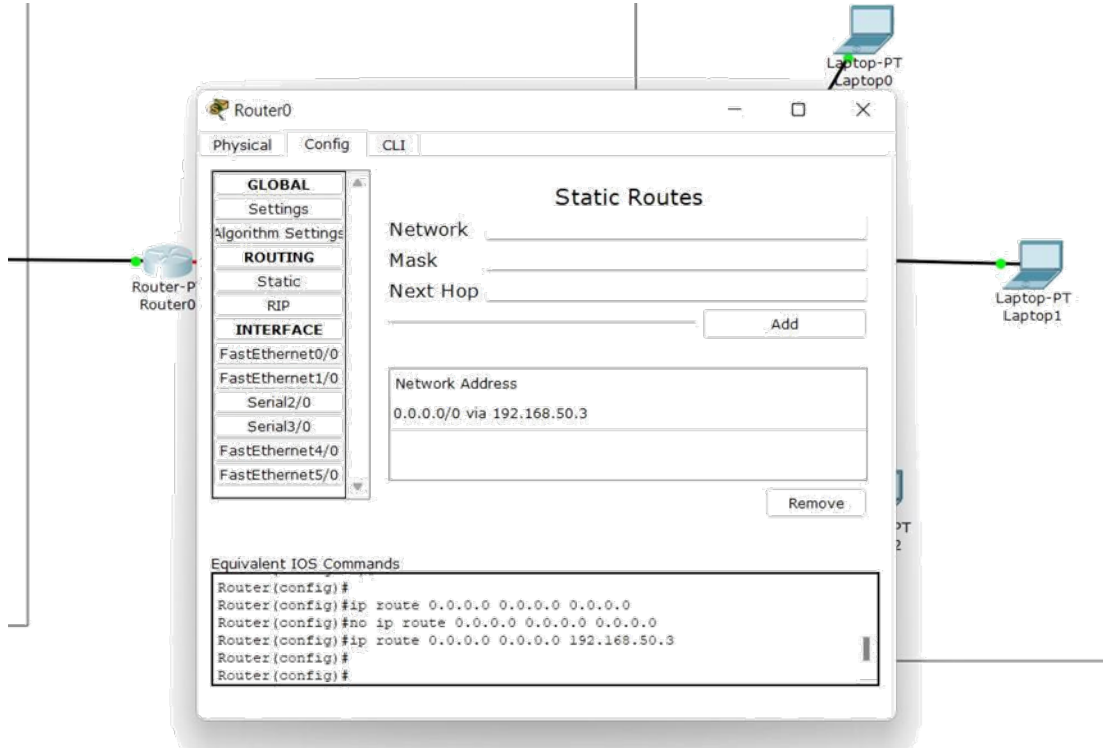
The screenshot displays the Cisco Packet Tracer Student interface. The main workspace shows a network topology with the following components:

- Left Network:** A central switch (Switch1) connected to three PCs (PC1, PC2, PC3).
- Central Network:** A chain of three routers (Router1, Router2, Router3) connected in series.
- Right Network:** A central switch (Switch2) connected to three laptops (Laptop1, Laptop2, Laptop3).

The interface includes several panels:

- Simulation Panel:** Shows a list of events with columns for Vis., Time(sec), Last Dest, At Dev, and Type. The list contains 10 entries, all of type ICMP.
- Play Controls:** Includes buttons for Back, Auto Capture/Play, and Capture/Forward.
- Event List:** Shows a table with columns for Scenario, Last Status, Source, Destination, Type, Color, Time(sec), Periodic, Num, Edit, and Delete. The current entry is Scenario 0, Last Status: Successful, Source: PC0, Destination: Laptop1, Type: ICMP, Time(sec): 0.000, Periodic: N, Num: 0.

The bottom status bar shows the system time as 12:39 on 23-04-2022, with a temperature of 36°C and a sunny weather icon.



The screenshot displays a network configuration window for Router1. The interface Serial2/0 is selected, showing the following configuration:

- Port Status: On
- Duplex: Full Duplex
- Clock Rate: 125000
- IP Configuration:
 - IP Address: 192.168.50.3
 - Subnet Mask: 255.255.255.0
- Tx Ring Limit: 10

Equivalent IOS Commands:

```
Router(config-if)#exit
Router(config)#ip route 0.0.0.0 0.0.0.0 192.168.50.2
Router(config)#
Router(config)#interface Serial2/0
Router(config-if)#
```