SENABADHY SESAN R
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B.TECH CSE - C III - YEAR

Observation

Objective: Create and configure a suitable topology for both LAN and WAN using 10-15 computers, routers, and switches. Simulate the transmission of a message from one network to a computer in another network.

Procedure:

- Topology Design:

- The network topology was successfully created in Cisco Packet Tracer, including both LAN and WAN configurations.
- The LAN was configured with 10-15 computers connected to at least two switches.
- The WAN setup was achieved by connecting the LAN networks via two routers.

- Network Setup:

- Devices were added and connected as per the topology design.
- IP addresses were correctly assigned to all computers within the LAN, ensuring proper communication.
- Router interfaces were configured with appropriate IP addresses to enable WAN communication between networks.

- LAN Configuration:

- All computers were connected to switches, and each computer was assigned a unique IP address within the specified subnet.
- Switches were connected to each other to ensure full LAN connectivity.

- WAN Configuration:

- Routers were successfully connected to each other, and interfaces were configured with correct IP addresses.

- Static routes were set up on the routers, enabling successful communication between the LANs over the WAN.

- Simulation:

- A message was sent from one computer in one LAN to a computer in another LAN using the simulation mode in Cisco Packet Tracer.

- The message was transmitted successfully across the network, traveling through switches, routers, and the WAN.

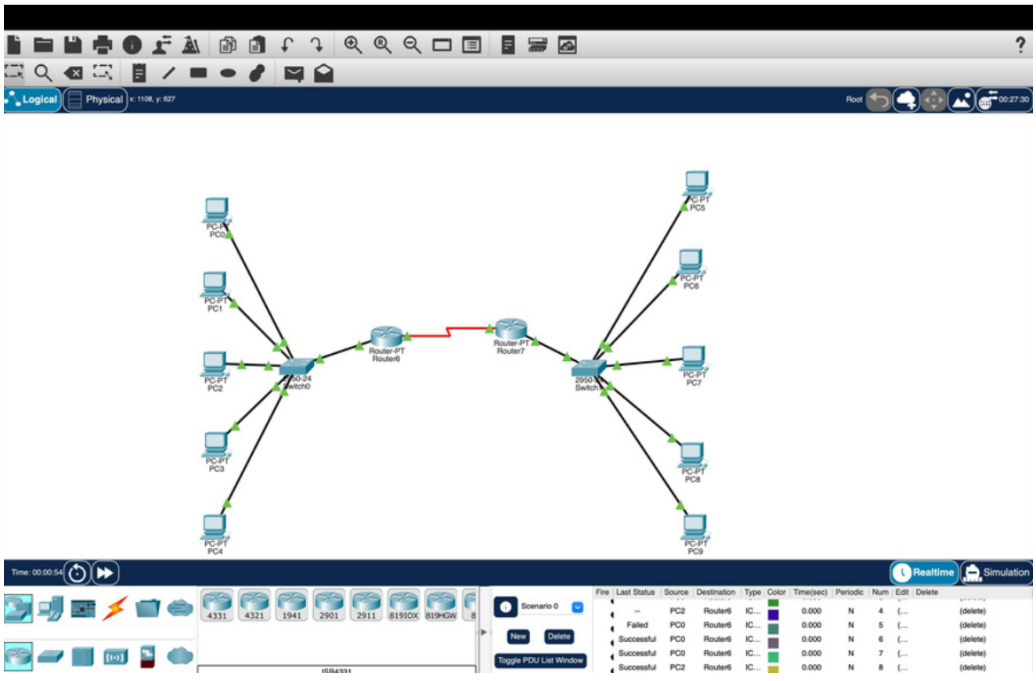
- The path of the message was observed, and the transmission was verified to be correct with no errors.

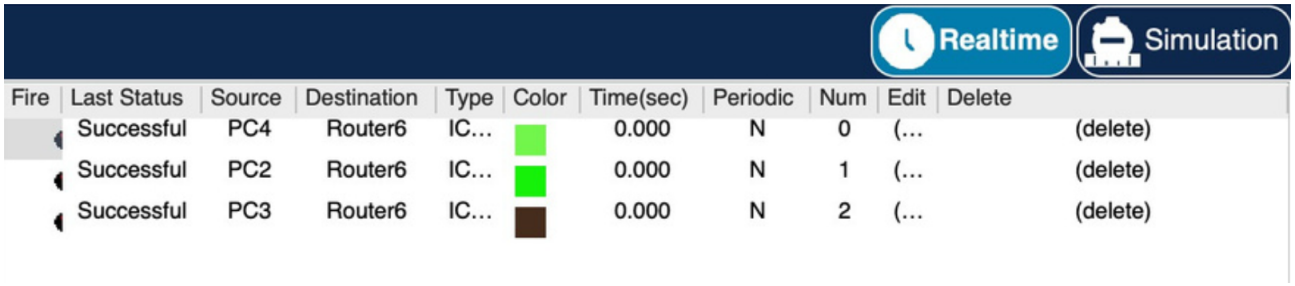
-Network Performance:

- The network operated as expected, with no packet loss or transmission errors observed.

- The successful message transmission confirmed that the network was properly configured for both LAN and WAN communication.

OUTPUT:




Realtime
Simulation
Fire
Last Status
Source
Destination
Type
Color
Time(sec)
Periodic
Num
Edit
Delete
Successful
PC4
Router6
IC...
0.000
N
0
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(delete)
Successful
PC2
Router6
IC...
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1
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Successful
PC3
Router6
IC...
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