SRM INSTITUTE OF SCIENCE AND TECHNOLOGY
TIRUCHIRAPPALLI CAMPUS

Report

CN LAB EXAM-I

Aim:

To create and Configure Suitable Network topology for both LAN and WAN using Cisco packet tracer Involving 10-15 Computers, Switches & routers. The goal is to Simulate the transmission of Message from Computer in one Network to a Computer in another Network, ensuring proper Connectivity & Communication across different network Segments.

Procedure:

1. Topology design:

LAN Configuration

- Design a Network topology with atleast 10 Computers Connected to Switches. Ensure the LAN Segment has appropriate Switch Connectivity.
- Implement WAN Configuration to Connect LAN network to another Network using the routers.

2. Network Setup

Add Devices

- place & Connect 10-15 Computers within LAN Segment.
- Add atleast 2 Switches to facilitate Connection of Computers.
- Introduce atleast two routers for WAN Connectivity.

Configure IP Addresses

- Assign IP Addresses to all Computers within LAN Segment, ensure each Computer has unique IP address with Same Subnet.

- Configure routers with respective IP Address & Setup routing protocols (or) Static routes to ensure Connection to different LAN through WAN.

3. Network Configuration

LAN

- Connect Computers to Switches using Network Cables.
- Configure IP Address on each Computer and Connect two Switches to establish LAN Connection.

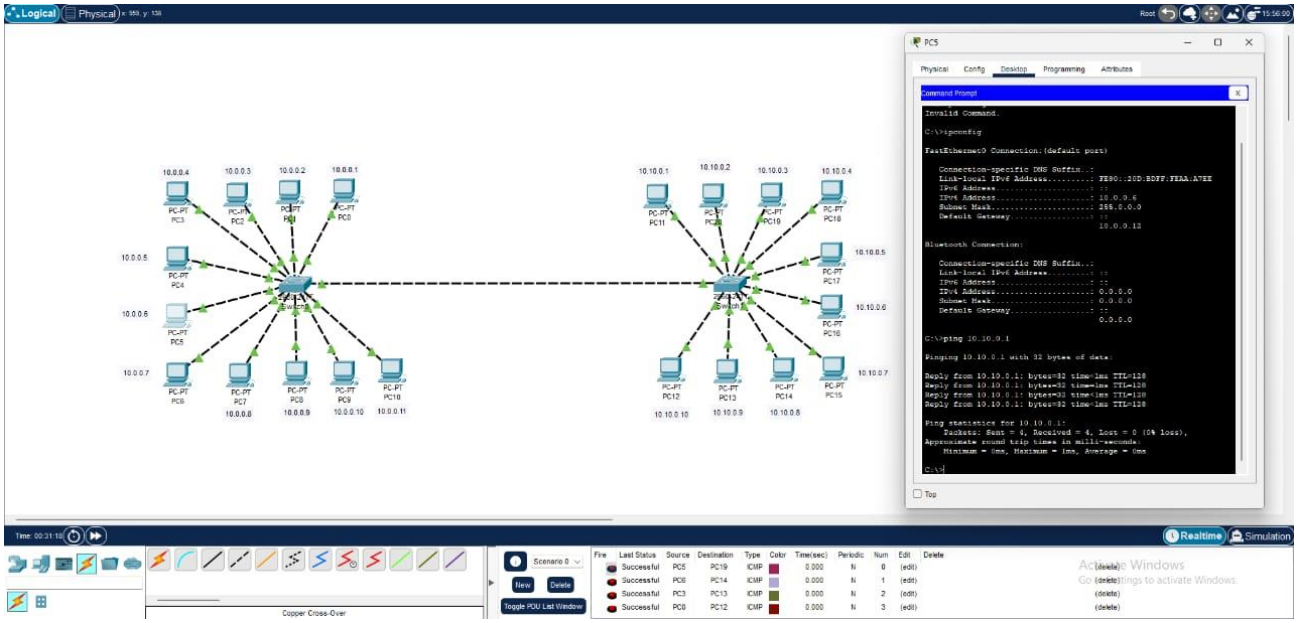
WAN

- Connect two routers to establish a WAN Connection.
- Configure router Interfaces with IP Address & Static / default ~~routes~~ dynamic routing for traffic between LAN Segments.

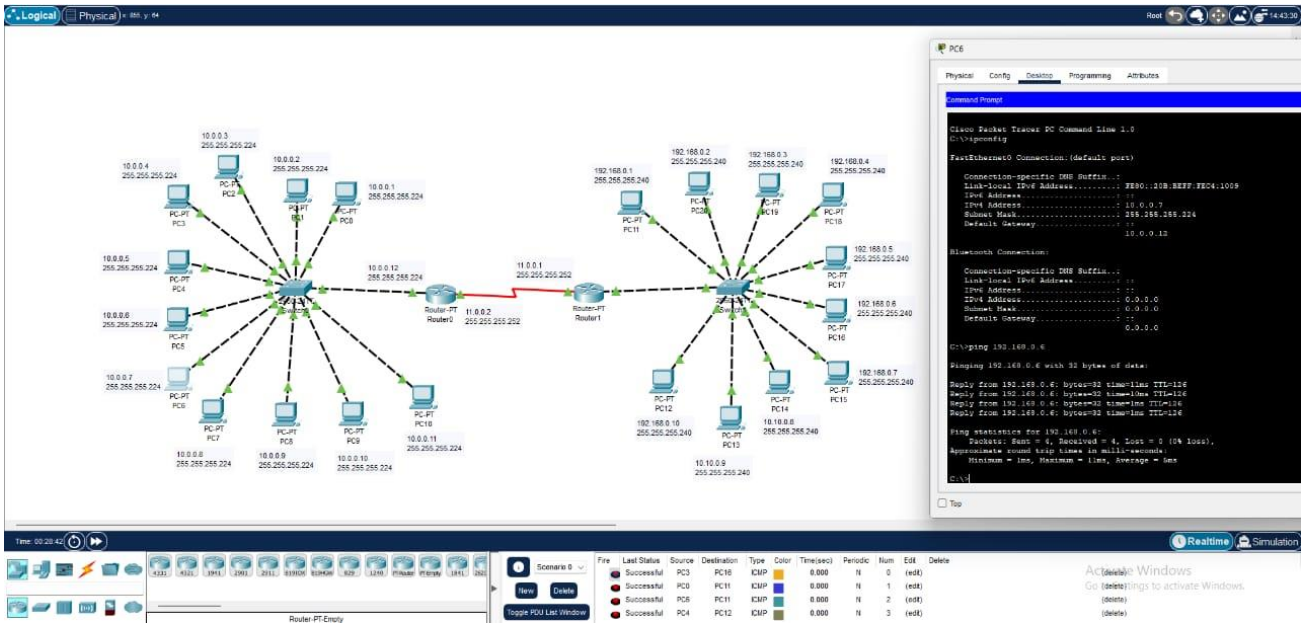
4. Checking Connectivity

- Send packets from one LAN to another and check if the Connectivity exists.
- ~~Capture~~ Verify the Message / packet transmission is Successfully & ~~delivered~~.

RESULT:



LAN



WAN