DHCP Server Configuration

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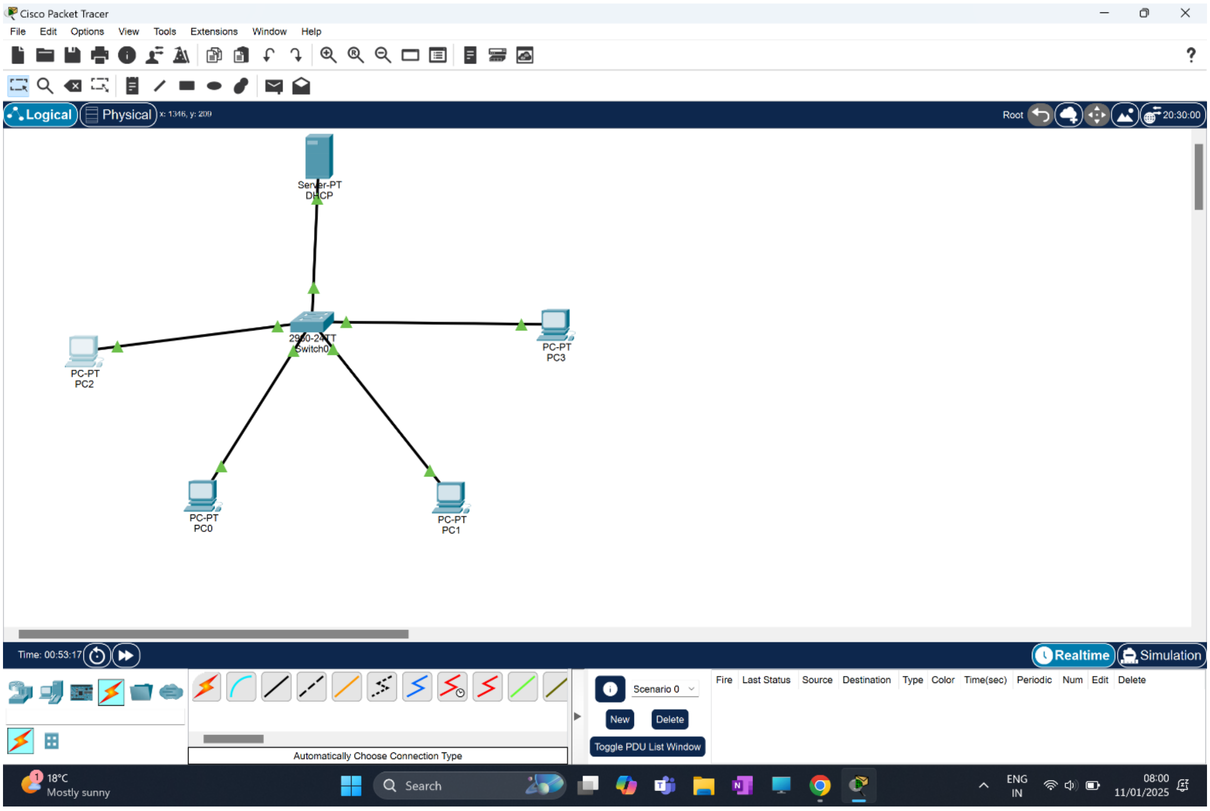
GITAM

Abstract

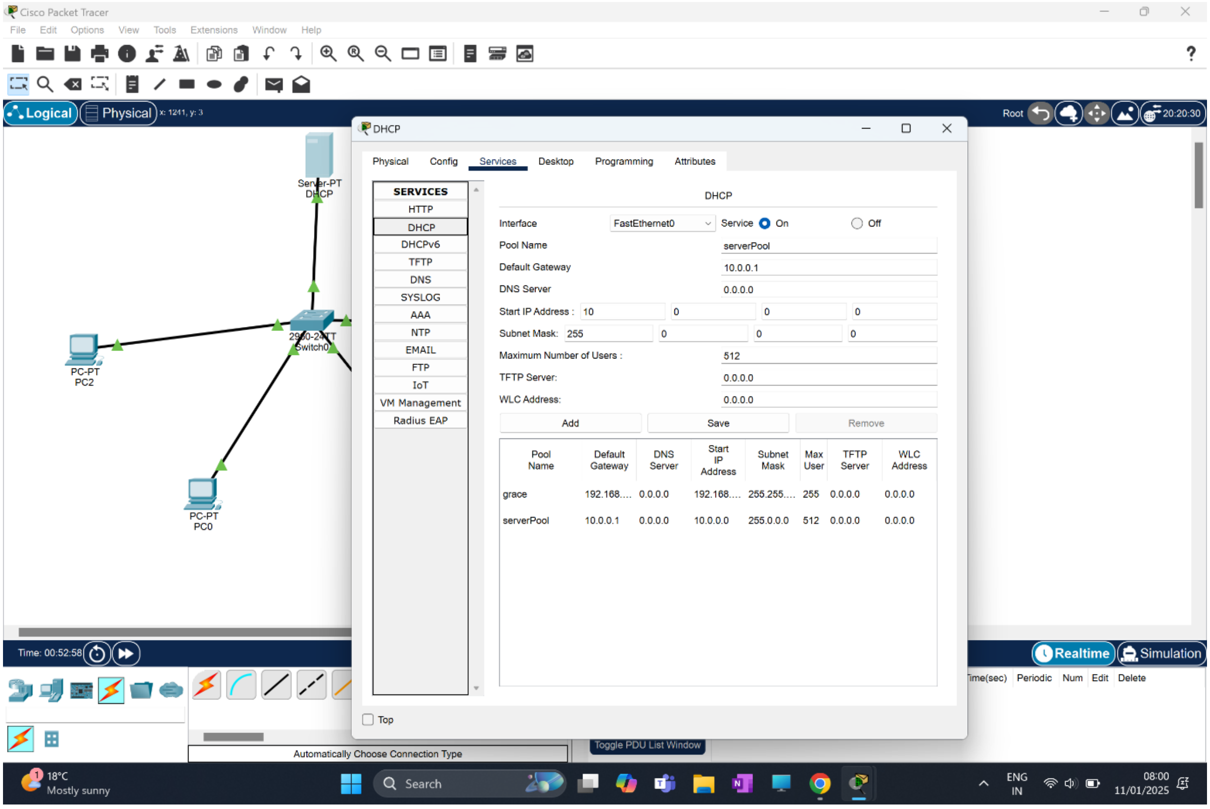
This document outlines the configuration of a DHCP (Dynamic Host Configuration Protocol) server. DHCP servers automatically assign IP addresses and other network parameters (such as subnet mask, default gateway, and DNS server addresses) to devices on a network, simplifying network administration and reducing manual configuration tasks.

Steps to configure DHCP Server

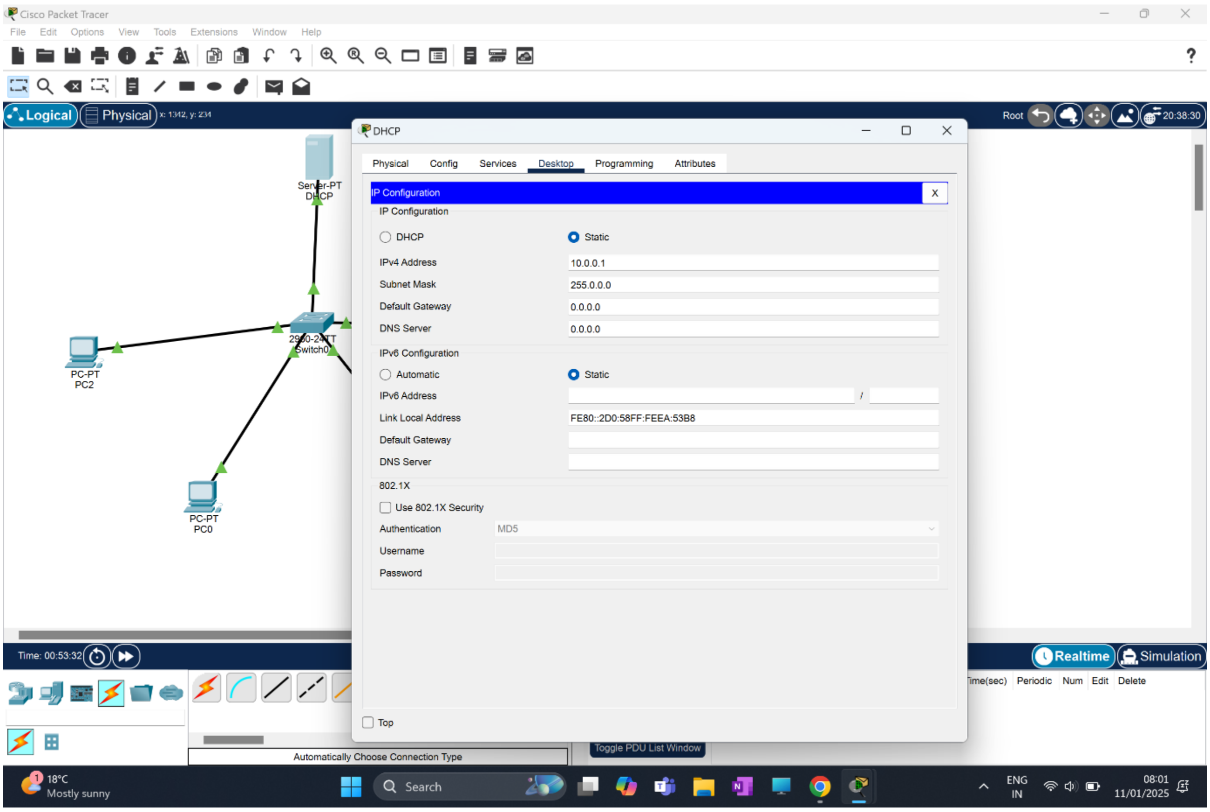
Step 1: prepare the network



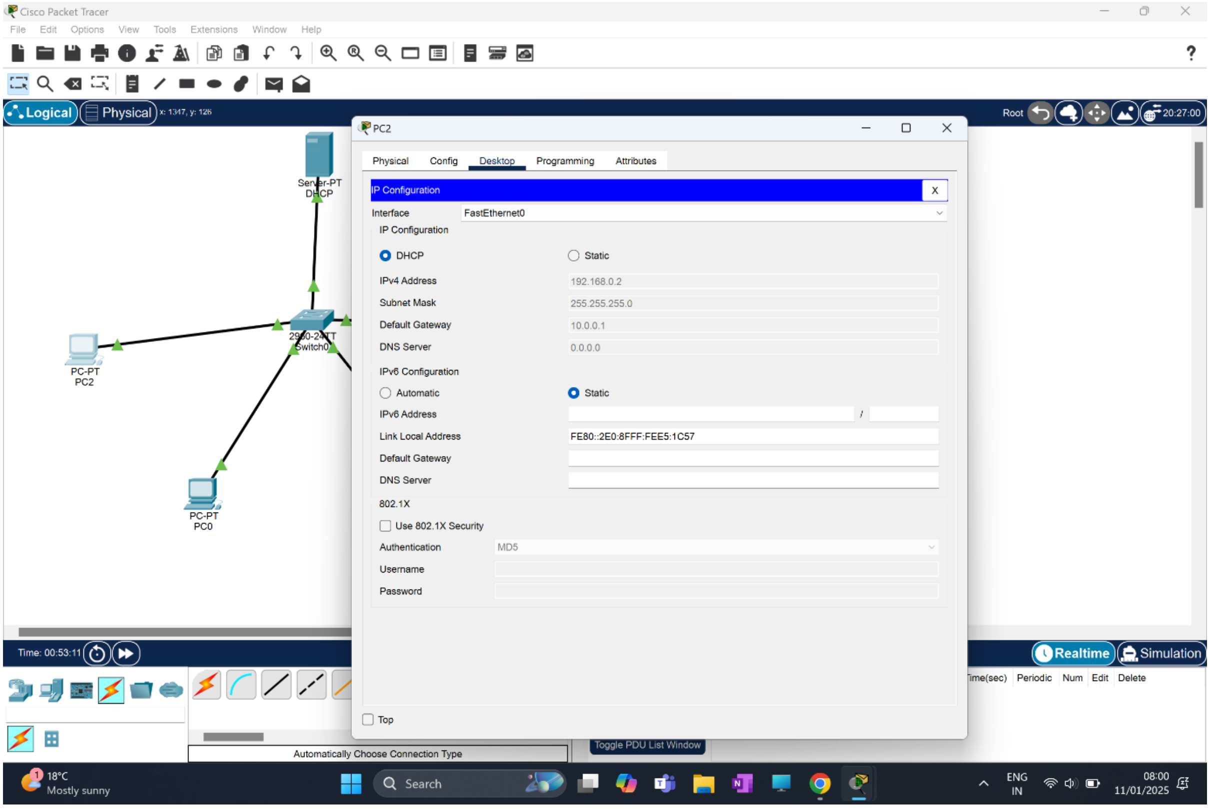
Step 2:configure the DHCP in server in services of server.



Step 3:assign ipv4 address to the server



Step 4:Assign default gateway i.e the ip address of the server and on the DHCP service.It will automatically assign the ip address.



How DHCP server works.

Here's how a DHCP server works in 5 points:

1. **Client Discovery:**
    - When a device (client) first connects to a network, it broadcasts a "DHCP Discover" message. This message is sent to all devices on the network to locate a DHCP server.
2. **Server Offer:**
    - A DHCP server receives the "DHCP Discover" message and selects an available IP address from its pool of addresses.
3. **Client Request:**
    - The client receives the "DHCP Offer" message.
4. **Server Acknowledgment:**

- The DHCP server receives the "DHCP Request" message and, if the IP address is still available, sends a "DHCP ACK" message to the client.
- This message confirms the lease and officially assigns the IP address and other network parameters to the client.

Thank you