3. Test and Send Messages

3.1. Verify Connectivity

1. **Ping Test:**
   - Open **Command Prompt** on **PC1** (Desktop > Command Prompt).
   - If successful, repeat to ping other PCs on the same switch.
2. **Ping Between Switches:**
   - If switches are interconnected, test communication between PCs on different switches:
   - Ensure connectivity is successful. If not, check inter-switch connections and IP configurations.

3.2. Send Messages Using Simulation Mode

1. **Switch to Simulation Mode:**
   - Click on the **"Simulation"** tab at the bottom-left of Packet Tracer.
2. **Add Simple PDU:**
   - Click on **"Add Simple PDU"** (packet icon) in the Simulation Mode toolbar.
3. **Select Source Device:**
   - Click on **PC1** (the source of the message).
4. **Select Destination Device:**
   - Click on **PC6** (the destination for the message).
5. **Configure the Message:**
   - A dialog will appear. Click **"OK"** to send the message.
6. **Observe Packet Flow:**
   - Click the **"Play"** (triangle icon) to start the simulation.
   - Watch the packet flow from **PC1** to **PC6** across the switches.

3.3. Examine Packet Details

1. **View Packet Details:**
   - Click on the **packet** in the simulation window to view details about the packet's journey and processing.
2. **Check Received Message:**
   - On **PC6**, open **Command Prompt** to verify if the message has been received or not.

Summary

- **Set Up Network:** Add and connect 10 PCs and 2 switches.
- **Configure IP Addresses:** Assign IP addresses to each PC.
- **Test Connectivity:** Use ping tests to verify network communication.
- **Send Messages:** Use Simulation Mode to send and observe messages between PCs.

By following these steps, you can successfully set up a network in Cisco Packet Tracer, connect devices, and simulate sending messages between PCs.

1. Set Up the Network

1.1. Add Devices

1. **Launch Cisco Packet Tracer:**
   - Open Cisco Packet Tracer on your computer.
2. **Add PCs:**
   - Drag and drop 10 **PC** devices onto the workspace.
3. **Add Switches:**
   - Drag and drop 2 **Switch** devices (e.g., **2960**) onto the workspace.

1.2. Connect Devices

1. **Connect PCs to Switches:**
   - Click on the **"Connections"** tool (lightning bolt icon).
   - Select **Copper Straight-Through** cable.
   - Click on a **PC** and select the **FastEthernet0** port.
   - Click on a **Switch** and select an available **FastEthernet** port (e.g., **Fa0/1**).
   - Repeat for the remaining PCs and switches.
2. **Interconnect Switches (Optional for Larger Networks):**
   - If you want Switch 1 and Switch 2 to communicate directly:
     - Click on **Copper Straight-Through** cable.
     - Click on **Switch 1** and select an available **FastEthernet** port (e.g., **Fa0/24**).
     - Click on **Switch 2** and select an available **FastEthernet** port (e.g., **Fa0/24**).

2. Configure IP Addresses

2.1. Configure IP Addresses on PCs

1. **Open PC Configuration:**
   - Click on **PC1** and go to the **"Desktop"** tab.
   - Open **"IP Configuration"**.
2. **Assign IP Address:**
   - Set the IP address, subnet mask, and default gateway. For example:
     - **PC1:**
       - IP Address: `192.168.1.2`
       - Subnet Mask: `255.255.255.0`
     - **PC2 to PC5:**
       - Assign IP addresses in the same subnet (e.g., `192.168.1.3` to `192.168.1.5`).
3. **Repeat for PCs on Switch 2:**
   - **PC6:**
     - IP Address: `192.168.2.2`
     - Subnet Mask: `255.255.255.0`
   - **PC7 to PC10:**
     - Assign IP addresses in the same subnet (e.g., `192.168.2.3` to `192.168.2.5`).