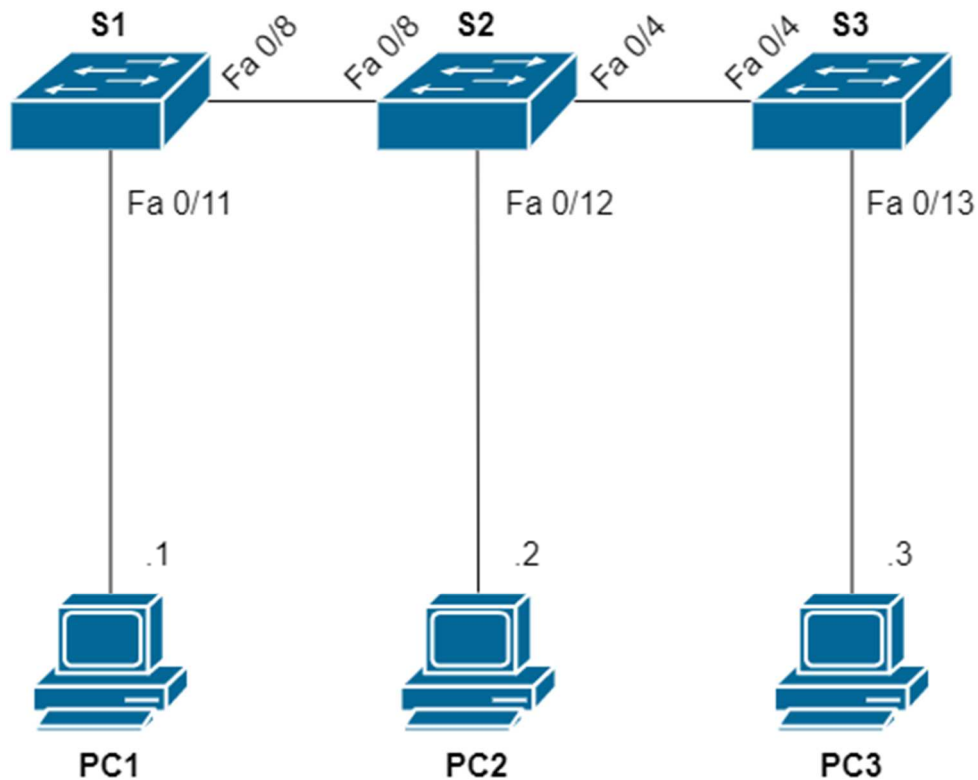# Packet Tracer 1 – Building a basic network

Topology

1. Figure: Topology diagram

Addressing Table

Device	Interface	IP Address	Subnet Mask
PC1	NIC	192.168.100.1	255.255.255.0
PC2	NIC	192.168.100.2	255.255.255.0
PC3	NIC	192.168.100.3	255.255.255.0

Objectives

- Set Up the Network Topology
- Configure PC Hosts

Background / Scenario

In this lab, you will build a simple network with hosts and switches.

You will apply IP addressing for this lab to the PCs to enable communication between them.

Use the **ping** utility to verify connectivity.

Instructions

Step 1: Set Up the Network Topology

Start Packet Tracer and login using your Netacad e-mail and password.

In this part of the exercise you have to build the network shown in Figure 1. The network contains 3 WS-2960C switches and 3 PCs as end devices.

To select the appropriate switch device, click on the first, *[Network Devices]* icon in the first row on the bottom left (selected by default) and the *[Switches]* icon (second icon) in the second row. To the right the available switches will be displayed.

Select the first option (*2960*) and deploy 3 switches by clicking in the main window. (See Figure 2. for reference.)
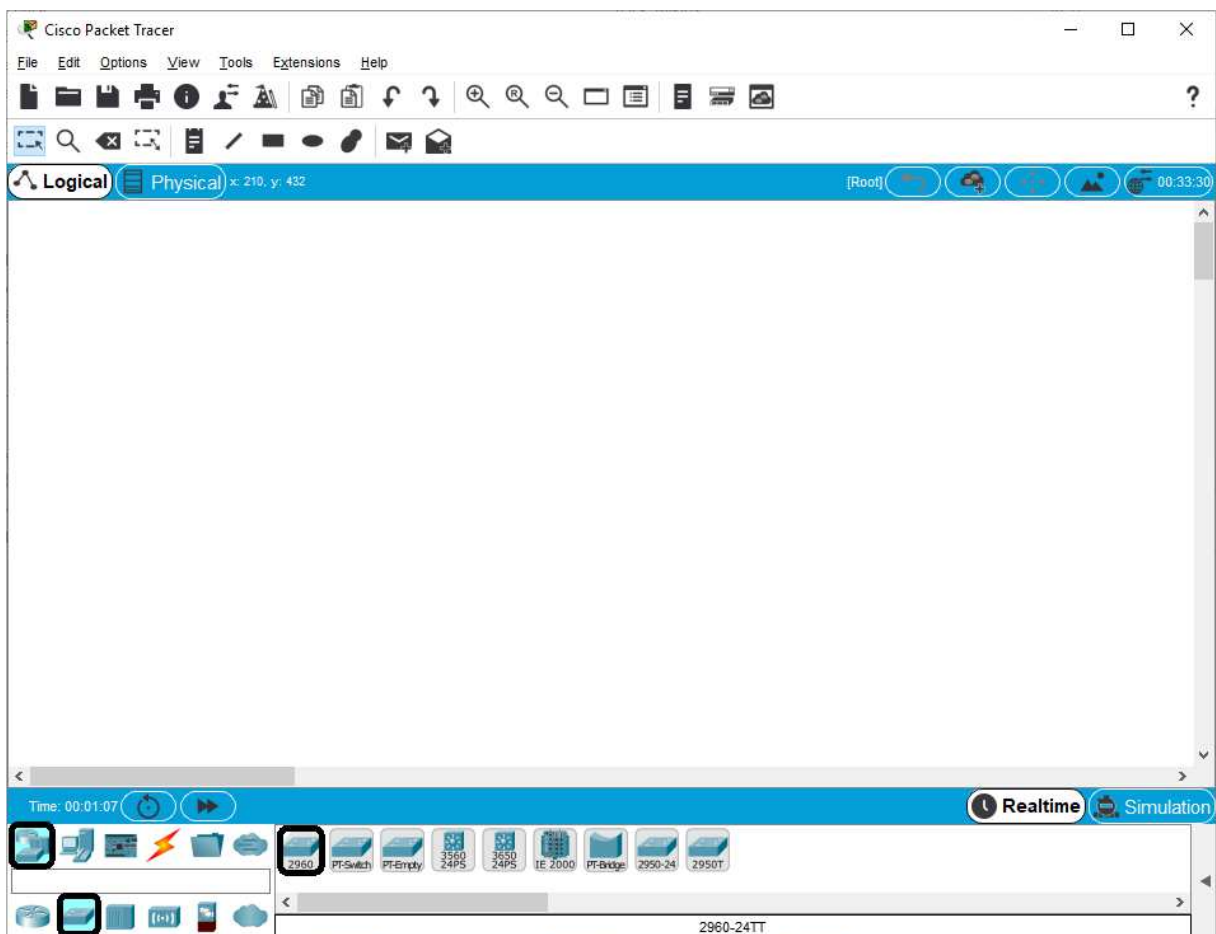
2. Figure - Selection of the network device

To select the appropriate end device, click on the second, *[End Devices]* icon in the first row on the bottom left, and select *PC* from the available options and deploy 3 PCs.

To connect the devices, click on the fourth, *[Connections]* icon, and choose *Copper Straight-Through*, denoted by a solid line (third icon). Then click on the devices to be connected and choose the appropriate ports (see Figure 3.).
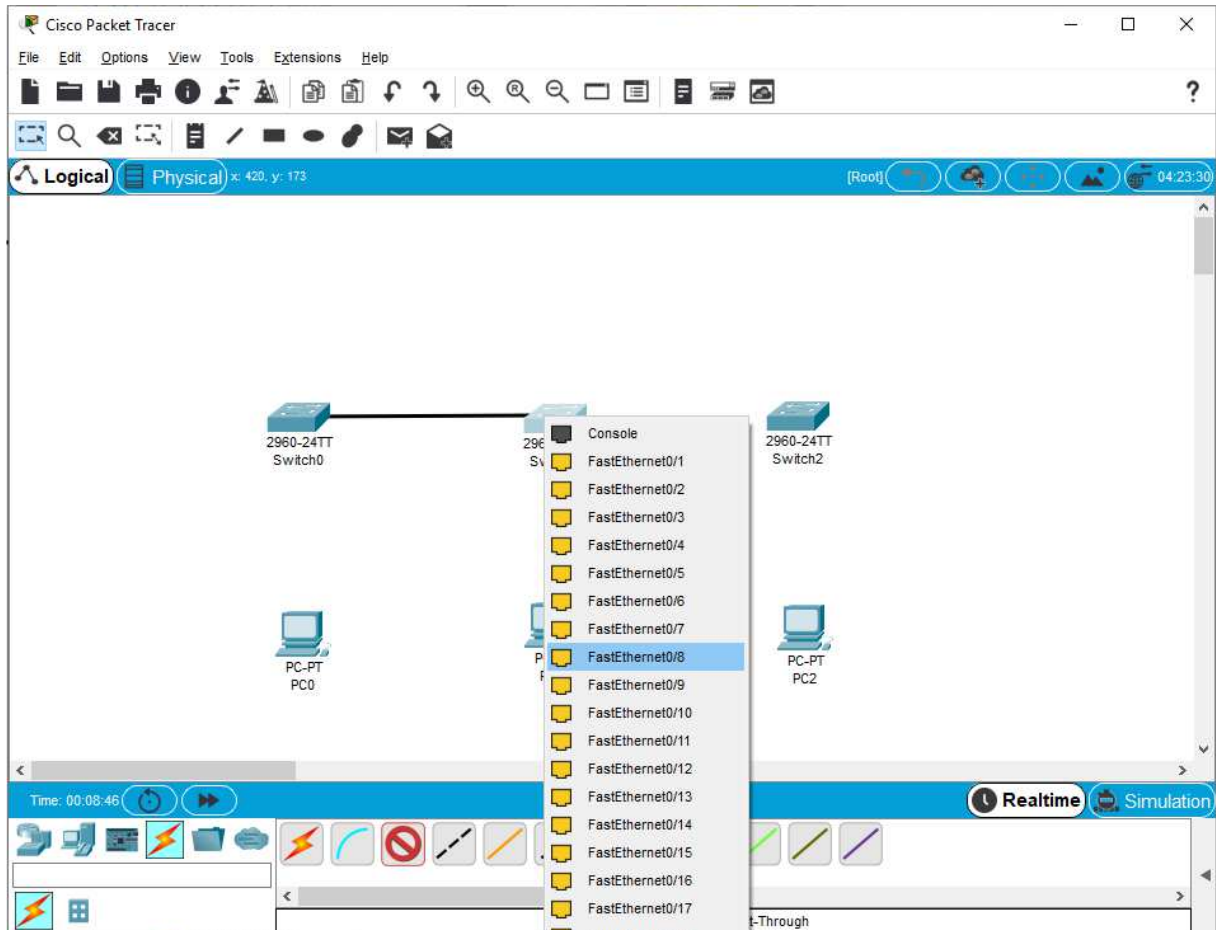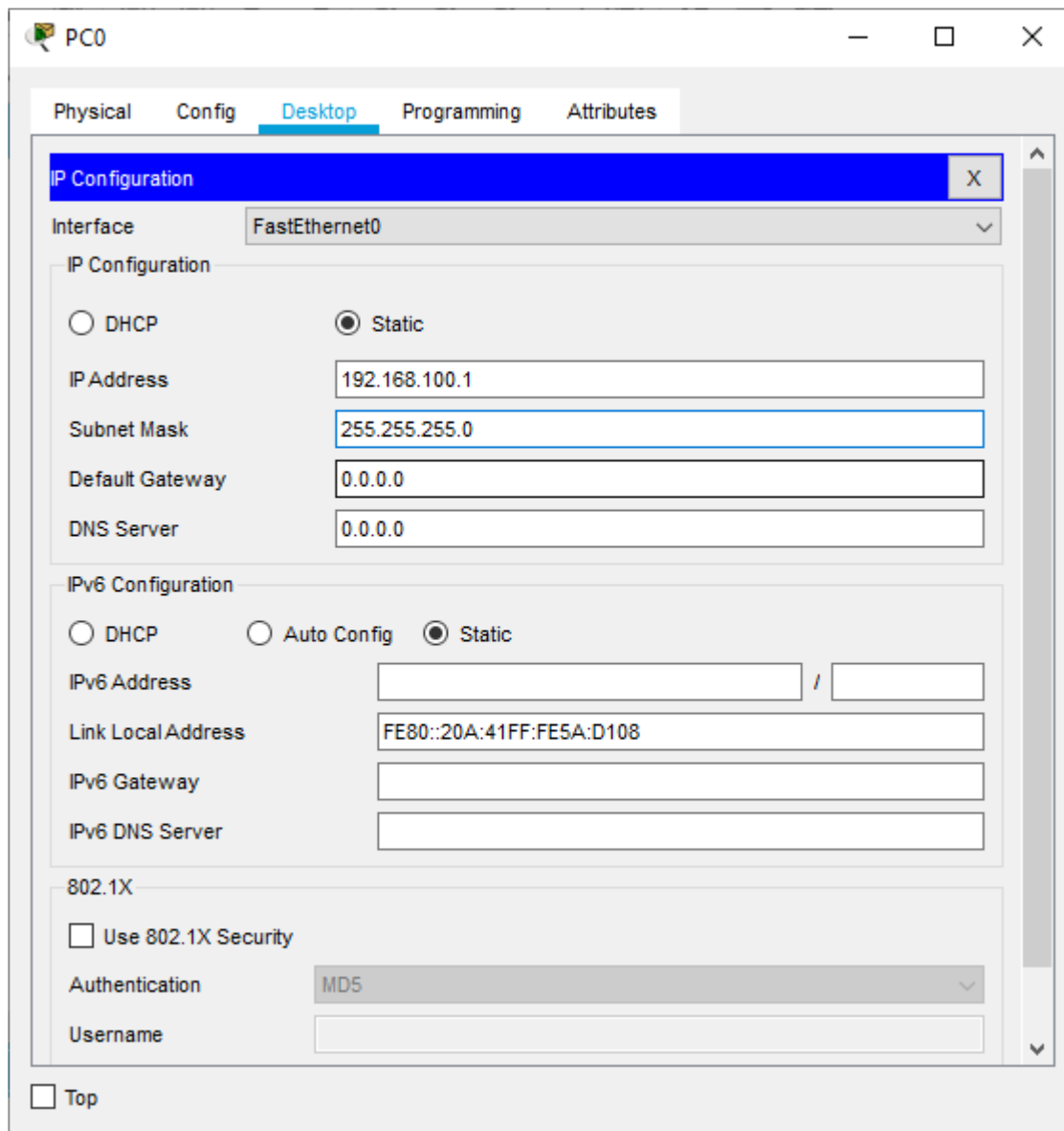

3. Figure - Setting up the cabling

Step 2: Configure PC Hosts

You only have to set the IP address of the PCs. To do so, click on the PC and select the *Desktop* tab and *IP Configuration*.

Make sure that the IP configuration is static.

Fill in the IP address according to the topology in Figure 1., e.g. for PC1 configure IP address 192.168.100.1. Set the subnet mask to 255.255.255.0.

4. Figure - Configuring the IP address

Step 3: Check the connectivity

To verify connectivity, close the *IP Configuration* window, open *Command Prompt* and ping the other PCs using the **ping <IP address>** command. If everything is configured correctly you should see response to the pings. If all packets are lost, check your cabling and configuration.