

LAB 0

Building a simple network

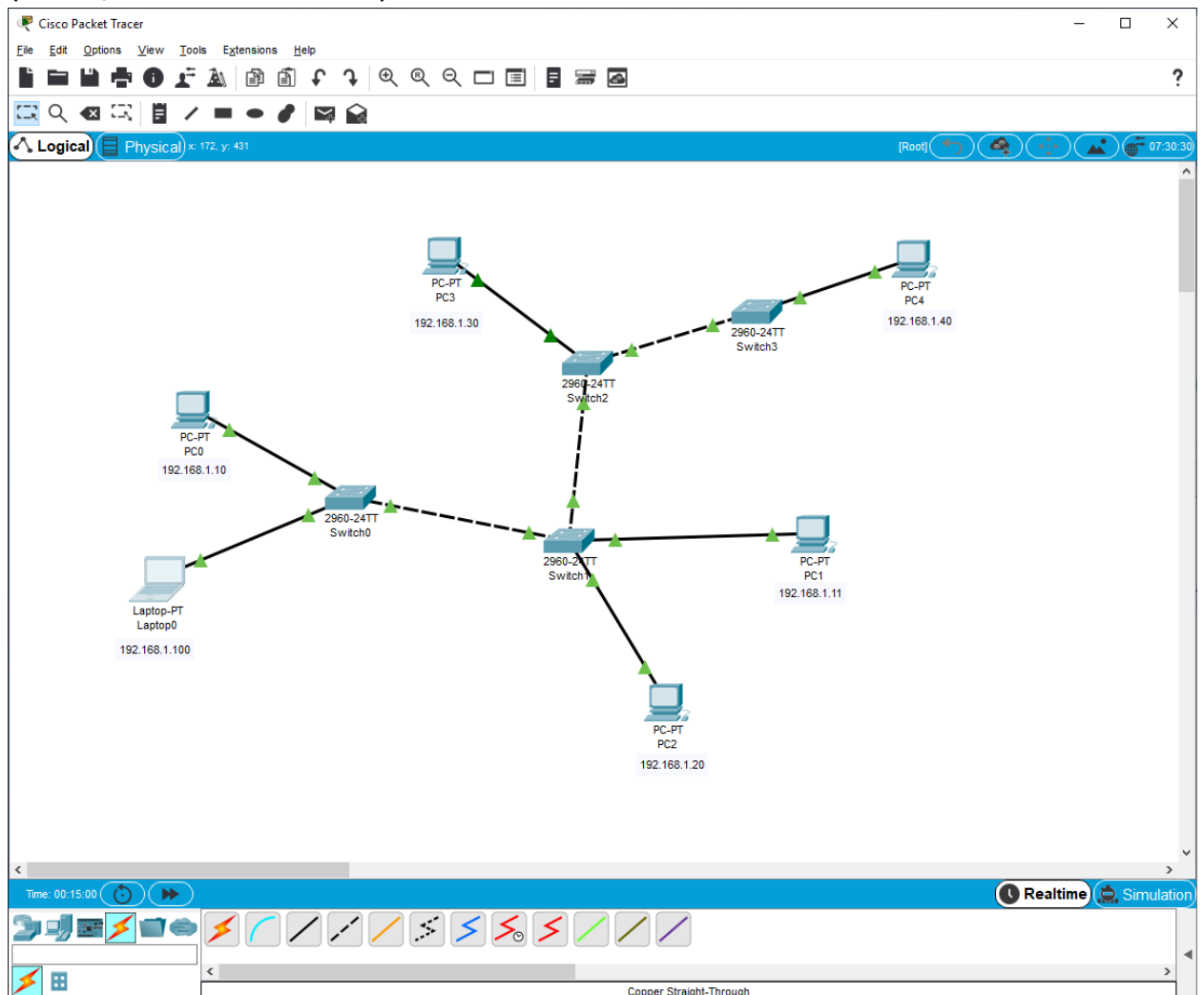
Select PCs \ Laptops as user devices

We will use 2960 switches

Connect devices of the same type with a cross cable

Connect the PC to the switches with a straight cable

We assign an IP address to each PC, for example will be used 192.168.1.0/24
(mask /24=255.255.255.0)



Open any PC, go to the Desktop tab and open IP Configuration

In the window that opens, enter the IP address in the IP Address line, enter the mask in the Subnet Mask field (24 mask is automatically substituted)

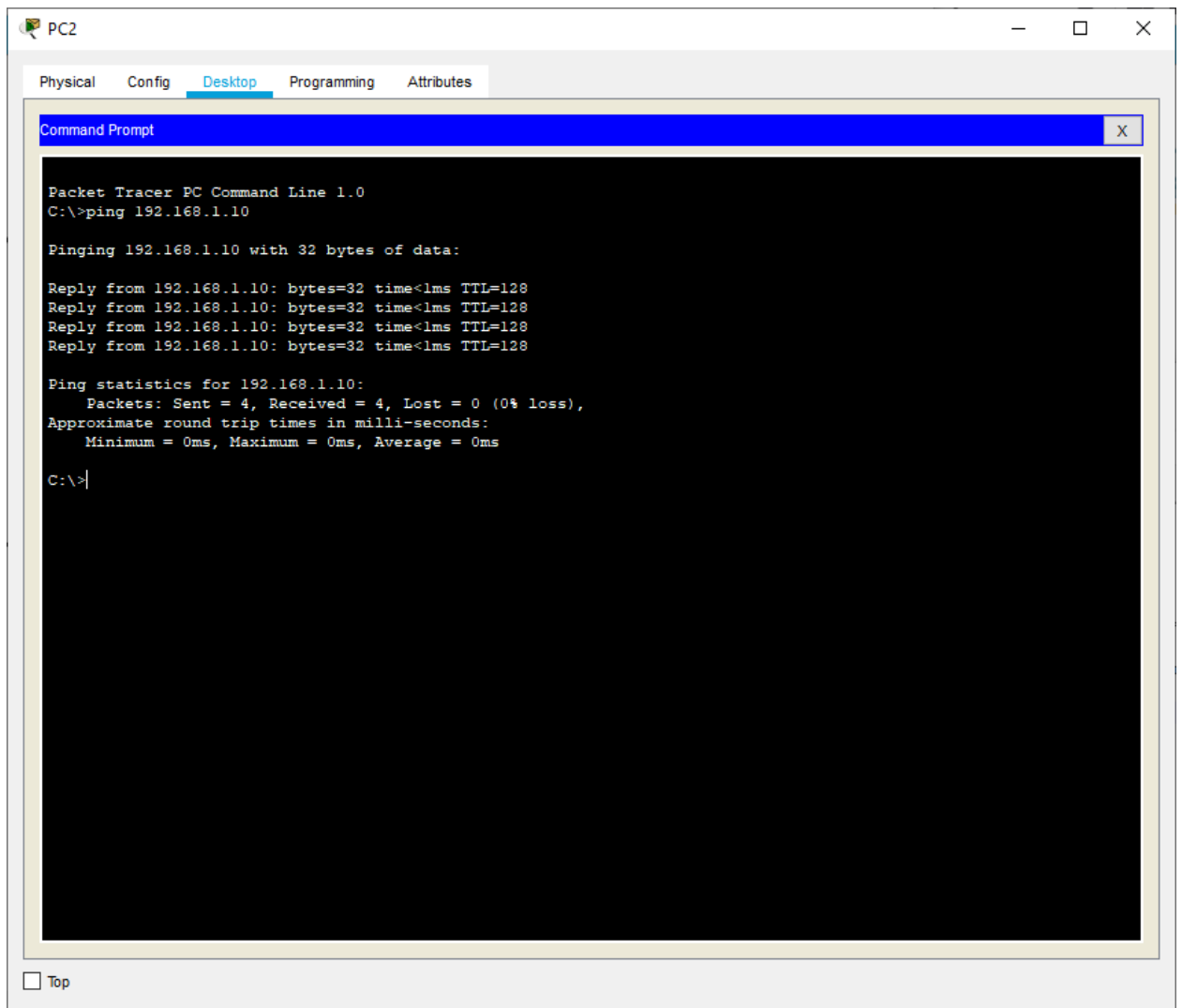
The screenshot shows the 'PC2' configuration window with the 'Desktop' tab selected. The 'IP Configuration' section is active, showing settings for the 'FastEthernet0' interface. The 'Static' radio button is selected under 'IP Configuration'. The fields are filled with: IP Address: 192.168.1.20, Subnet Mask: 255.255.255.0, Default Gateway: 0.0.0.0, and DNS Server: 0.0.0.0. The 'IPv6 Configuration' section shows 'Static' selected, with fields for IPv6 Address, Link Local Address (FE80::201:96FF:FEA5:5157), IPv6 Gateway, and IPv6 DNS Server. The '802.1X' section has 'Use 802.1X Security' unchecked, and 'Authentication' set to 'MD5'.

IP Configuration	
Interface	FastEthernet0
<input type="radio"/> DHCP <input checked="" type="radio"/> Static	
IP Address	192.168.1.20
Subnet Mask	255.255.255.0
Default Gateway	0.0.0.0
DNS Server	0.0.0.0

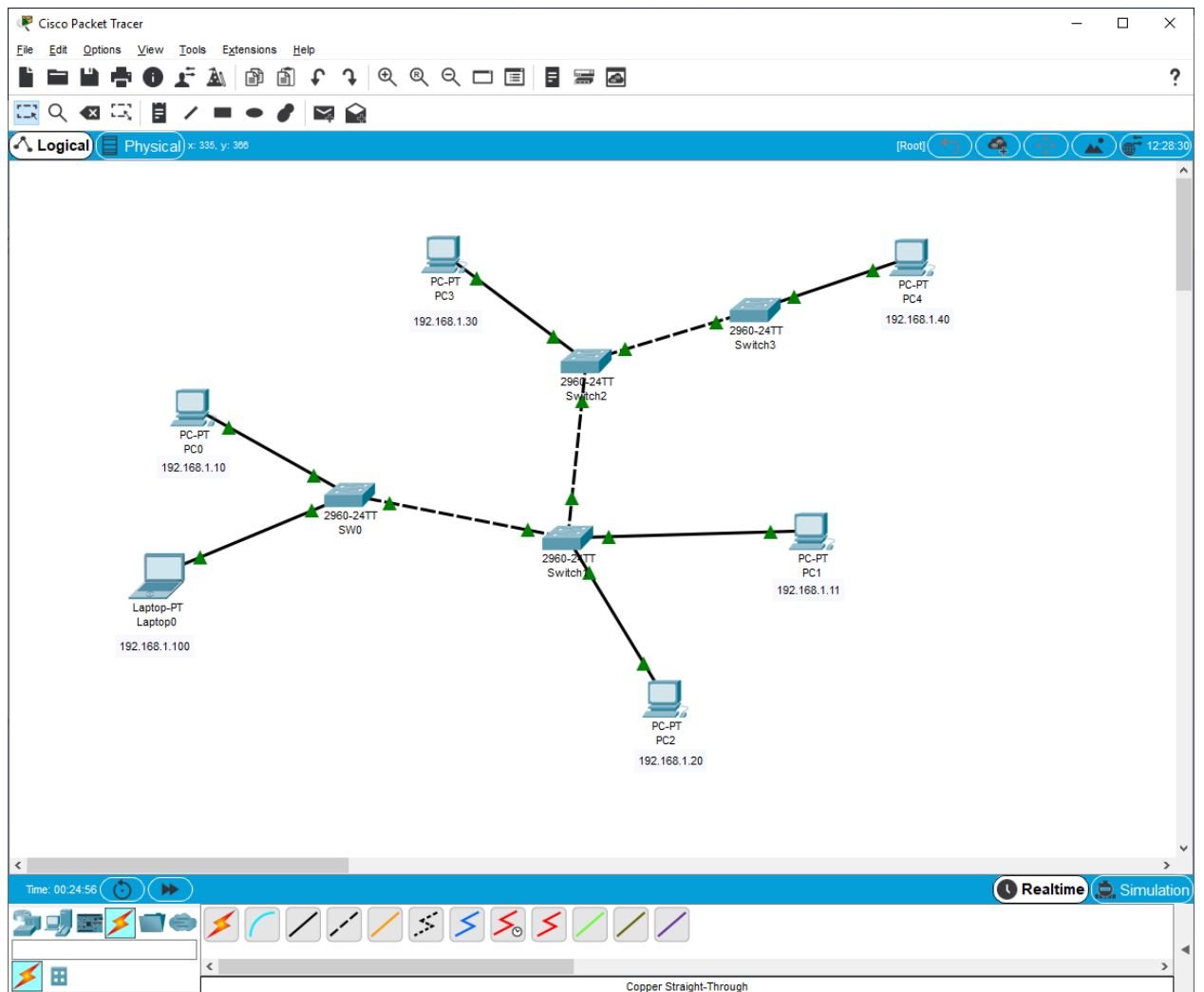
IPv6 Configuration	
<input type="radio"/> DHCP <input type="radio"/> Auto Config <input checked="" type="radio"/> Static	
IPv6 Address	
Link Local Address	FE80::201:96FF:FEA5:5157
IPv6 Gateway	
IPv6 DNS Server	

802.1X	
<input type="checkbox"/> Use 802.1X Security	
Authentication	MD5
Username	
Password	

We use the ping command to check the network, for this on any PC you need to go to the Desktop tab and open Command Prompt
Then enter ping (for example, with PC2 ping 192.168.1.10)



For convenience, you can rename the switches on the diagram and in the switch itself



Click on the line with the name of the switch on the diagram and change it to any other (Switch0 -> SW0)

Open the switch and go to the CLI tab

Press Enter

Go to the privileged mode, enter en (from the word enable)

Then go to the configuration mode with the command conf t (config terminal)

Then enter hostname% NAME% (hostname SW0)

