

## LAB 0

Building a simple network

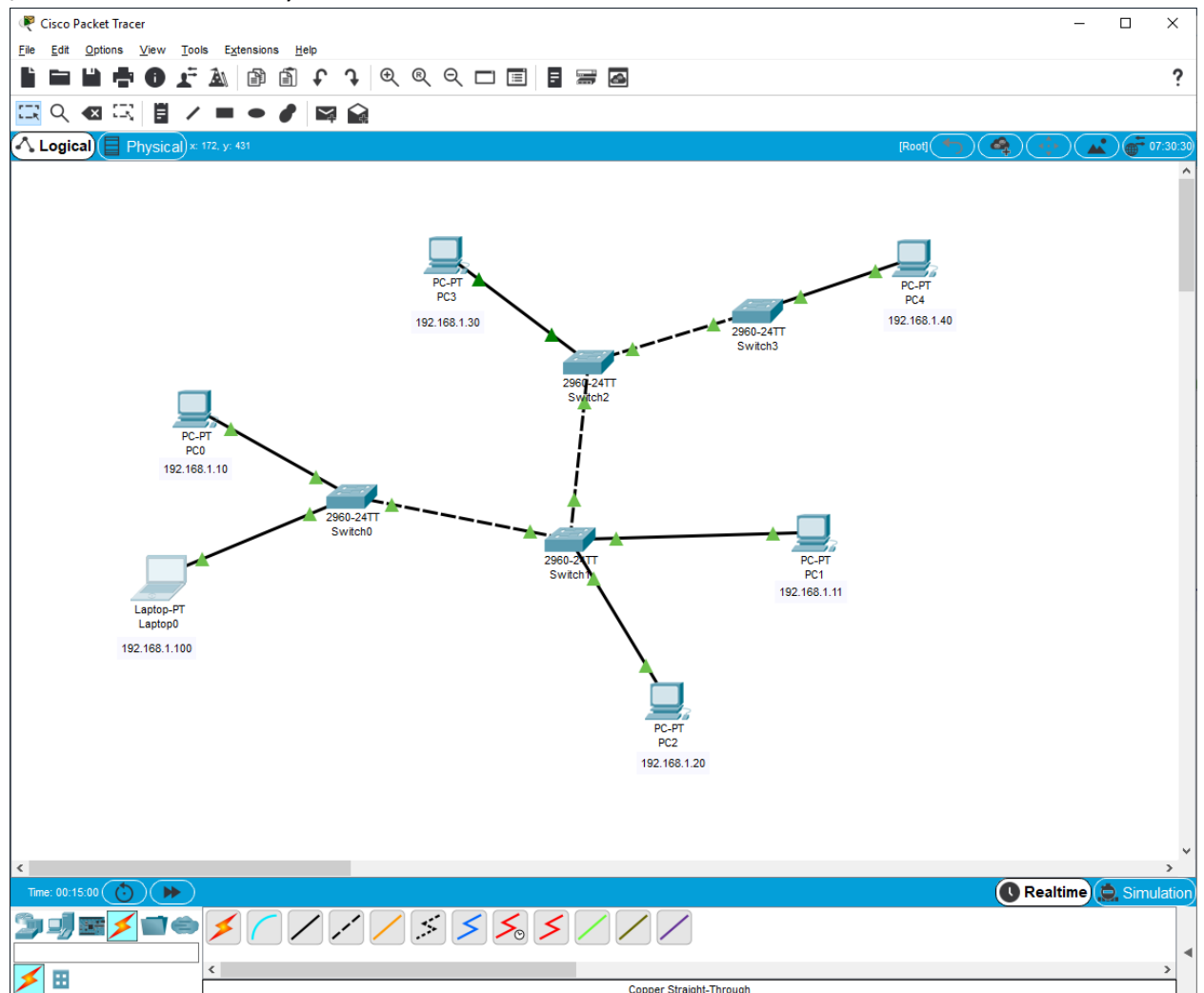
Select PCs \ Laptops as user devices

We will use 2960 switches

Connect devices of the same type with a cross cable

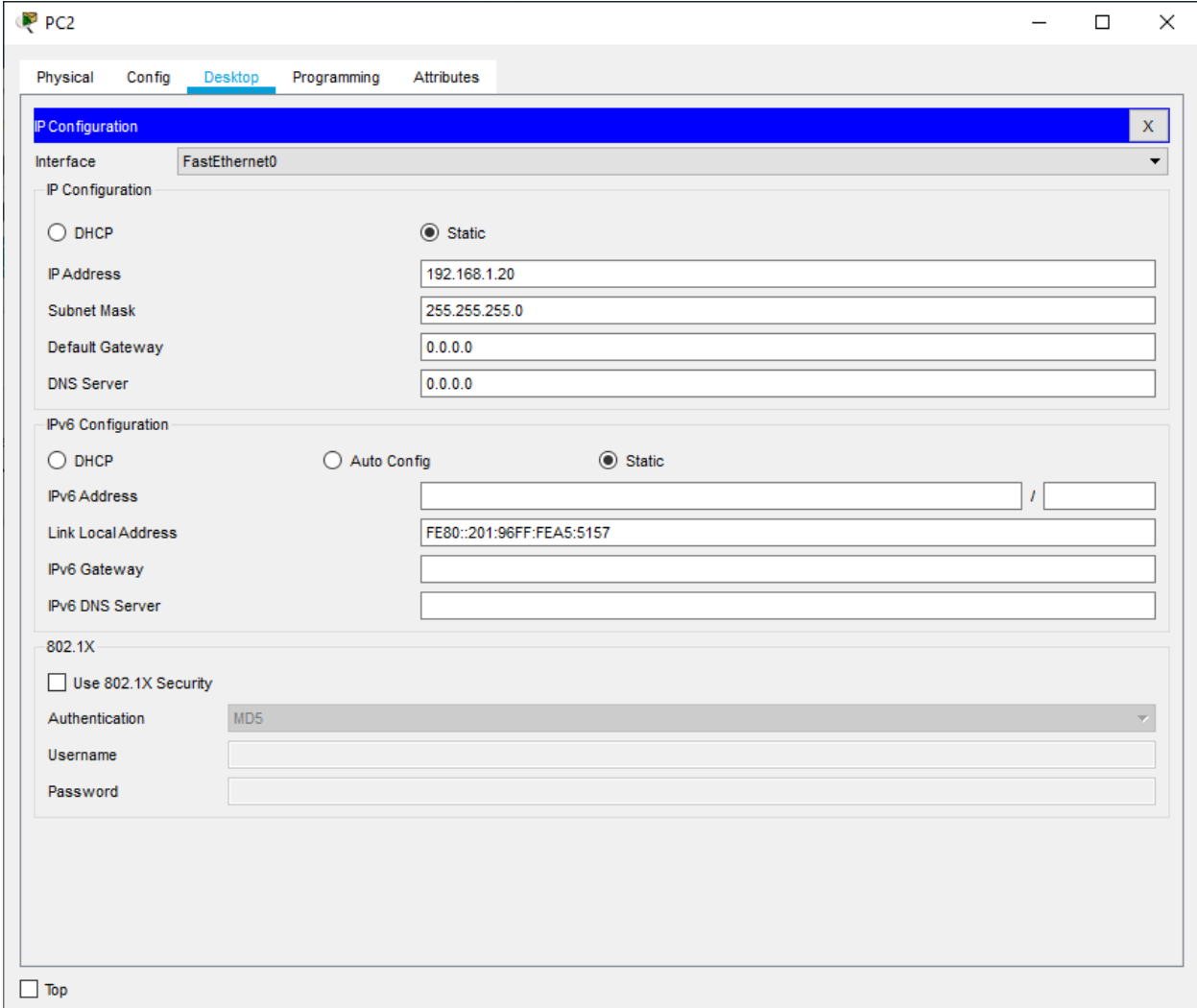
Connect the PC to the switches with a straight cable

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 expanded, 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 is also visible, with 'Static' selected and a Link Local Address of FE80::201:96FF:FEA5:5157. The '802.1X' section is at the bottom, with 'Use 802.1X Security' unchecked and 'Authentication' set to MD5.

PC2

Physical Config **Desktop** Programming Attributes

IP Configuration X

Interface FastEthernet0

IP Configuration

☐ DHCP ☒ 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

☐ DHCP ☐ Auto Config ☒ Static

IPv6 Address /

Link Local Address FE80::201:96FF:FEA5:5157

IPv6 Gateway

IPv6 DNS Server

802.1X

☐ Use 802.1X Security

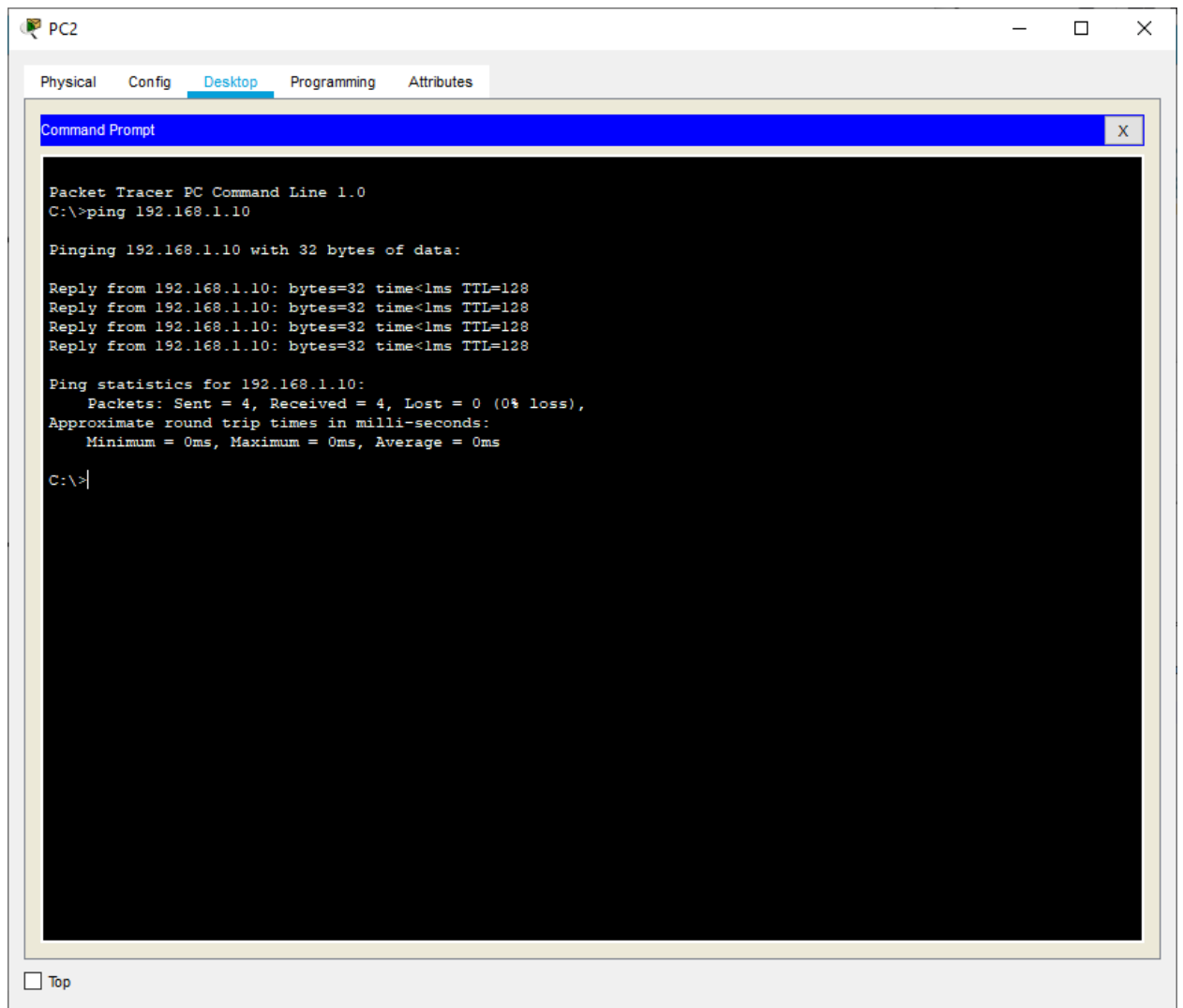
Authentication MD5

Username

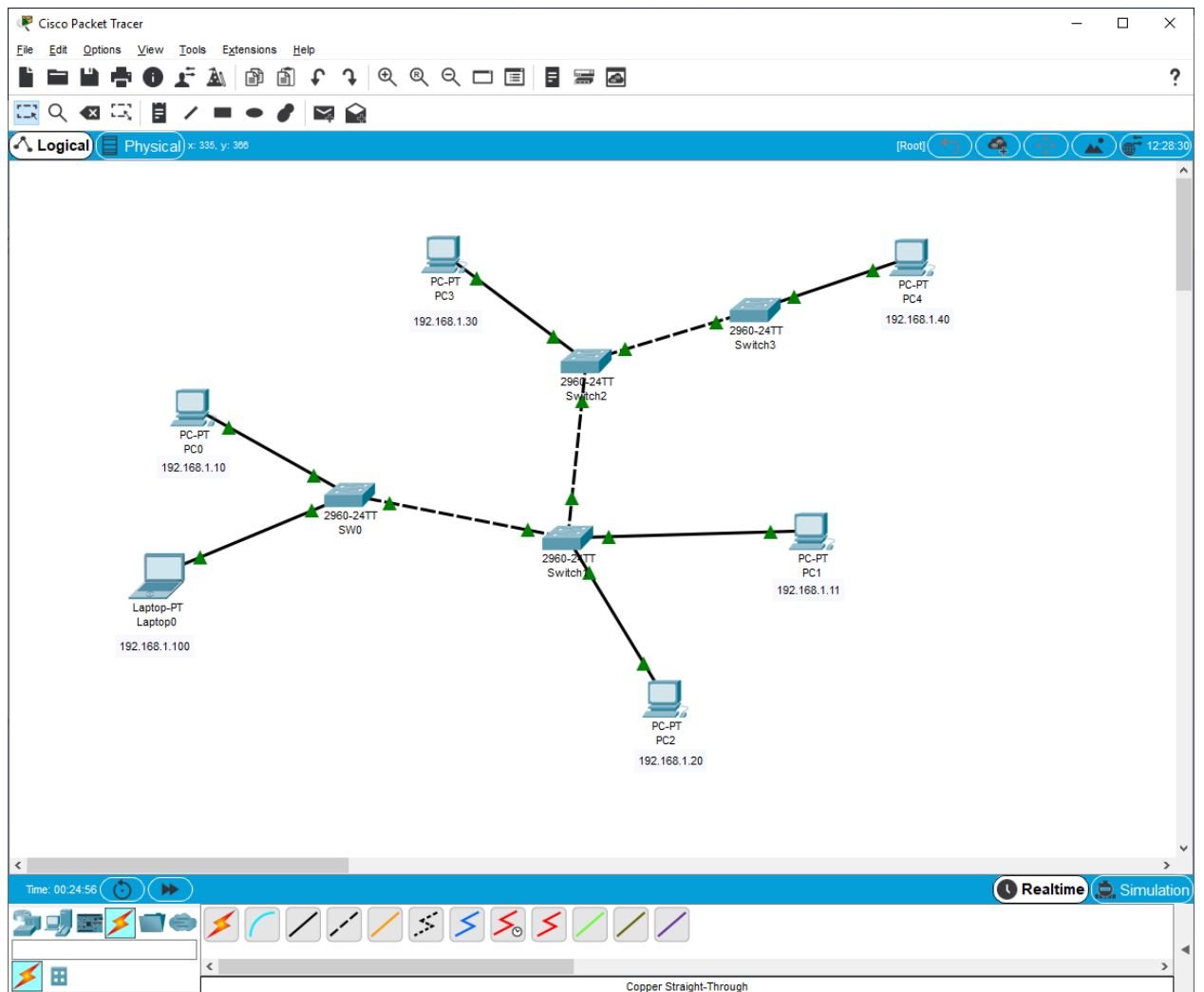
Password

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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)

