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Packet Tracer - Design and Build a Small Network - Physical Mode

Addressing Table

Device	Interface	IP Address / Prefix	Default Gateway
R1	G0/0	10.0.4.1/28	N/A
		2001:db8:acad::1/64	
		fe80::1	
R2	G0/1	10.0.0.1/22	N/A
		2001:db8:acad:1::1/64	
		Fe80::1	
S1	VLAN 1	10.0.0.2/22	10.0.0.1/22
S2	VLAN 1	10.0.4.2/28	10.0.4.1/28
PC0	NIC	10.0.3.254/22	10.0.0.1/22
		2001:db8:acad:1::a/64	fe80::1
PC1	NIC	10.0.4.14/28	10.0.4.1/28
		2001:db8:acad:0::b/64	fe80::1

LAN	NETWORK ADDRESS	FIRST IP ADDRESS	LAST IP ADDRESS	BROADCAST ADDRESS
S1	10.0.0.0/22	10.0.0.1/22	10.0.3.254/22	10.0.3.255/22
S2	10.0.4.0/28	10.0.4.1/28	10.0.4.14/28	10.0.4.15/2

Objectives

Explain how a small network of directly connected segments is created, configured, and verified.

Background /Scenario

In this Packet Tracer Physical Mode (PTPM) activity, you will design and build a network from scratch. Your design must include a minimum of one Cisco 4321 router, two Cisco 2960 switches, and two PCs. Fully configure the network and use IPv4 or IPv6 (subnetting must be included as a part of your addressing scheme). Verify the network using at least five show commands. Secure the network using SSH, secure passwords, and console passwords (minimum).

Reflection Questions

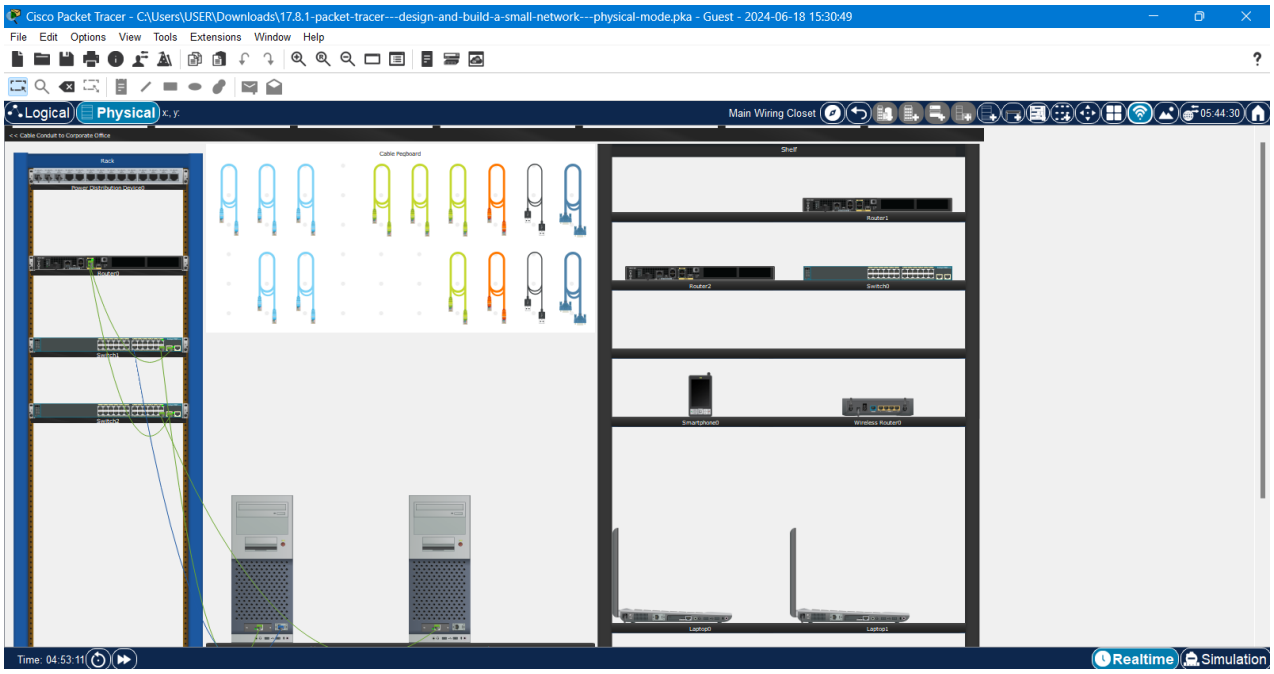
1. What was the most difficult portion of this activity?

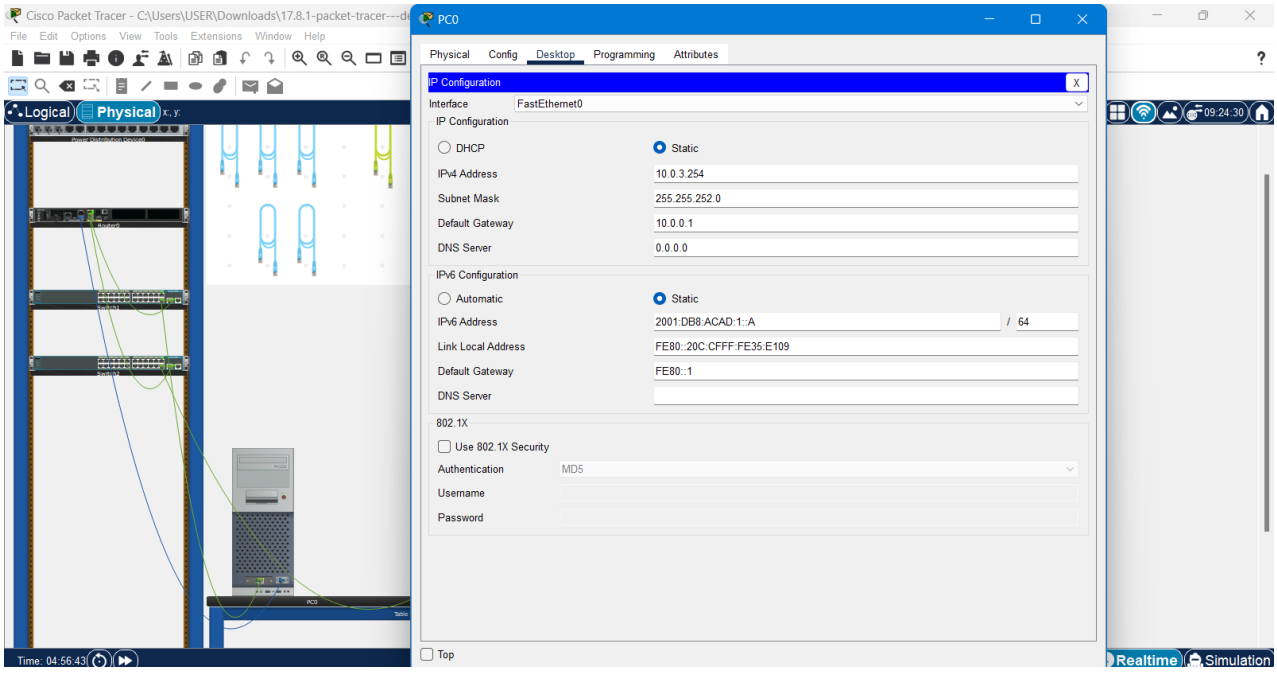
   I consider the most difficult part is IPv4 subnetting by using VLSM.

2. Why do you think network documentation is so important to this activity and in the real world?

   Documentation is imperative to good network management. Without it, network administrators have to recreate topologies, physically check addressing, etc. This takes time, which could be used elsewhere.
   Create a small network of directly connected segments, at a minimum 1 router, 2 switches and 2 PCs, and include a screenshot of the network in your final documentation.

Packet Tracer - Skills Integration Challenge





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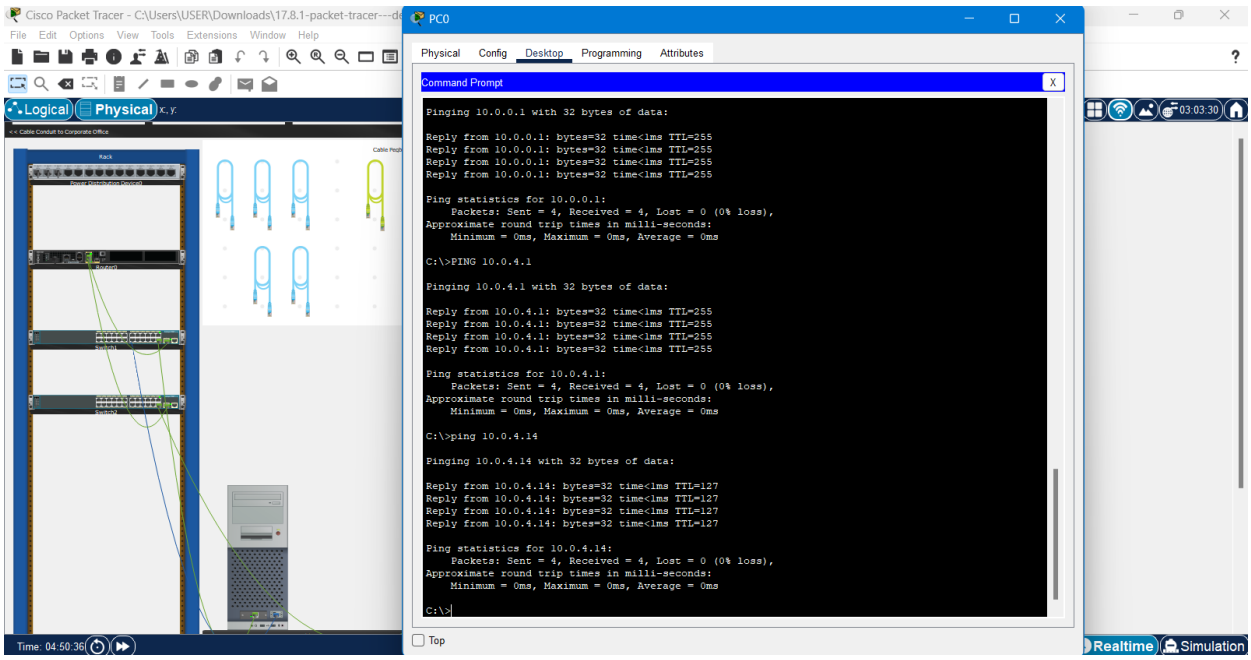
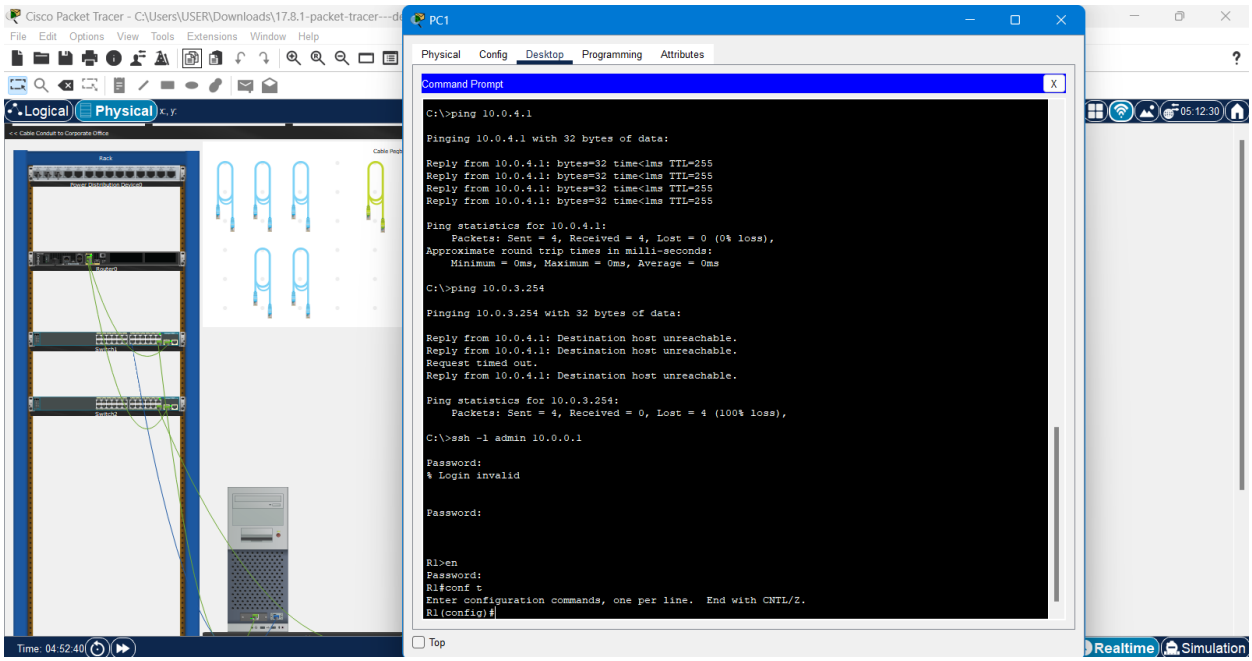
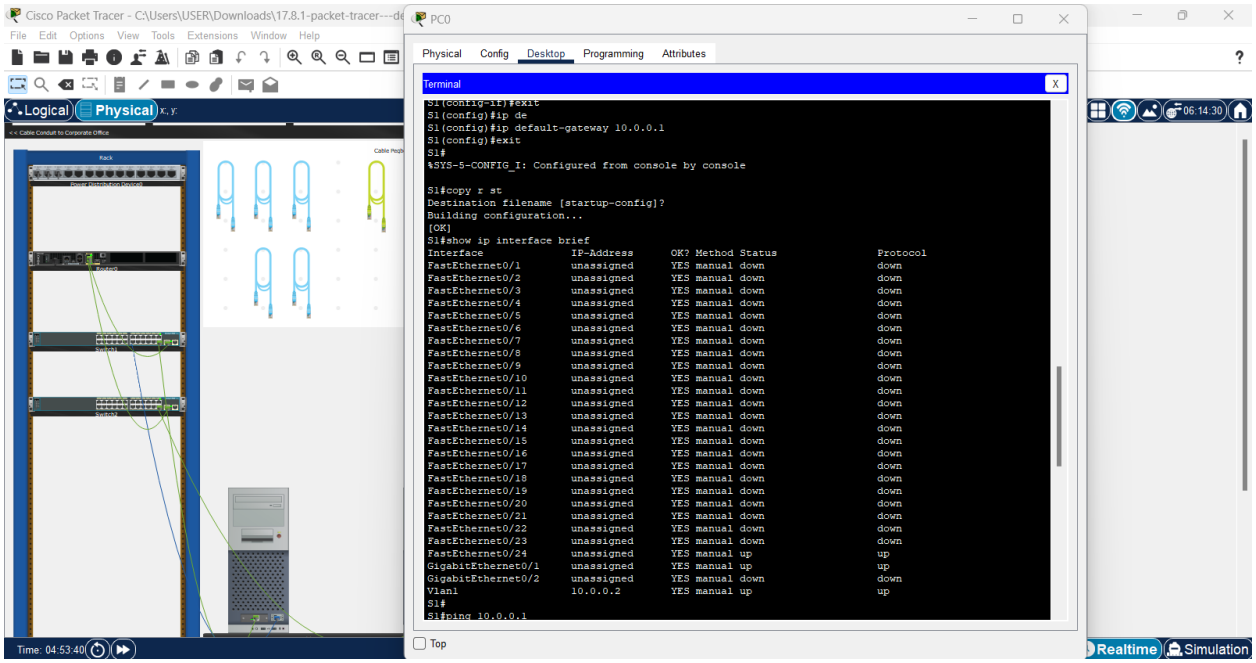
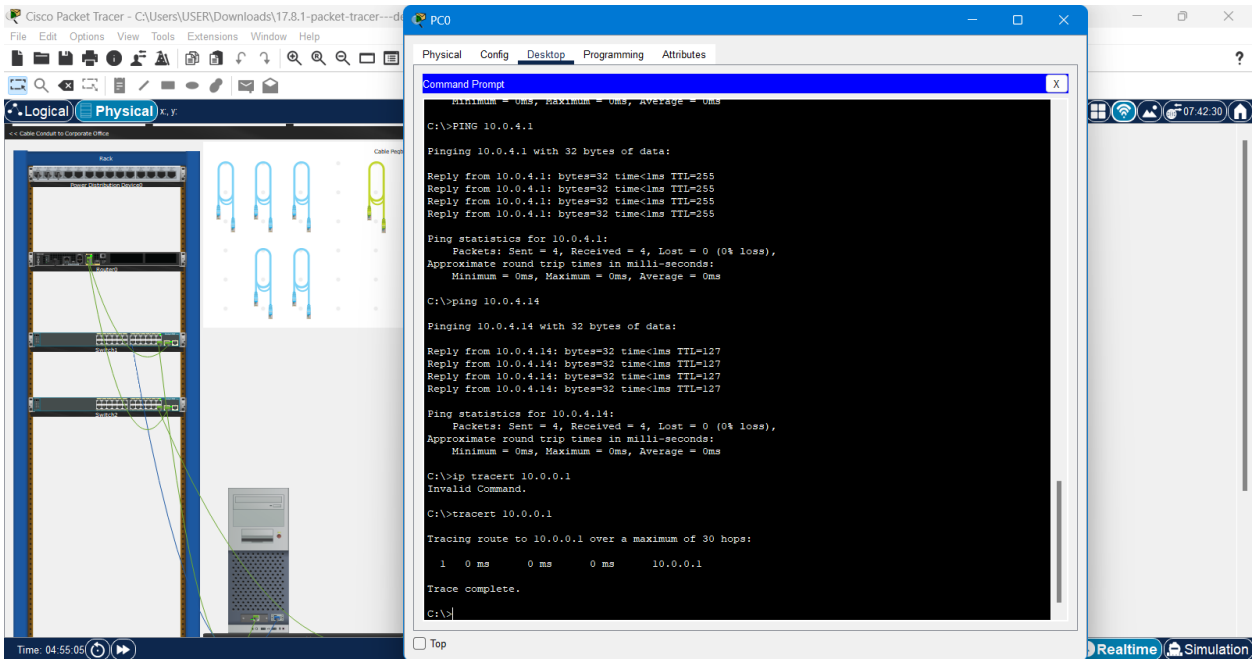




Packet Tracer - Skills Integration Challenge





Packet Tracer - Skills Integration Challenge