

Packet Tracer - Implement a Small Network

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Addressing Table

Device	Interface	Address	Subnet Mask	Default Gateway
RTA	G0/0	10.10.10.1	255.255.255.0	N/A
	G0/1	10.10.20.1	255.255.255.0	N/A
SW1	VLAN1	10.10.10.2	255.255.255.0	10.10.10.1
SW2	VLAN1	10.10.20.2	255.255.255.0	10.10.20.1
PC-1	NIC	10.10.10.10	255.255.255.0	10.10.10.1
PC-2	NIC	10.10.20.10	255.255.255.0	10.10.20.1

Objectives

Part 1: Create the Network Topology

Part 2: Configure Devices and Verify Connectivity

Instructions

Part 1: Create the Network Topology

Step 1: Obtain the required devices.

- Click the **Network Devices** icon in the bottom tool bar.
- Click the router icon in the submenu.
- Locate the **1941** router icon. Click and drag the icon for the 1941 router into the topology area.
- Click the switch entry in the submenu.
- Locate the **2960** switch icon. Click and drag the icon for the 2960 switch into the topology area.
- Repeat the step above so that there are **two** 2960 switches in the topology area.
- Click the **End Devices** icon.
- Locate the PC icon. Drag **two** PCs to the topology area.
- Arrange the devices into a layout that you can work with by clicking and dragging.

Step 2: Name the devices.

The devices have default names that you will need to change. You will name the devices as shown in the Addressing Table. You are changing the display names of the devices. This is the text label that appears below each device. Your display names must match the information in the Addressing Table **exactly**. If a display name does not match, you will not be scored for your device configuration.

- Click the device display name that is below the device icon. A text field should appear with a flashing insertion point. If the configuration window for the device appears, close it and try again, clicking a little further away from the device icon.

- b. Replace the current display name with the appropriate display name from the Addressing Table.
- c. Repeat until all devices are named.

Step 3: Connect the devices.

- a. Click the orange lightning bolt connections icon in the bottom toolbar.
- b. Locate the Copper Straight-Through cable icon. It looks like a solid black diagonal line.
- c. To connect the device, click the Copper Straight-Through cable icon and then click the first device that you want to connect. Select the correct port and then click the second device. Select the correct port and the devices will be connected.
- d. Connect the devices as specified in the table below.

From Device	Port	To Device	Port
RTA	G0/0	SW1	G0/1
	G0/1	SW2	G0/1
SW1	F0/1	PC-1	Fastethernet0
SW2	F0/1	PC-2	Fastethernet0

Part 2: Configure Devices

Record the PC addressing and gateway addresses in the addressing table. You can use any available address in the network for PC-1 and PC-2.

Step 1: Configure the router.

- a. Configure basic settings.
 - 1) Hostname as shown in the Addressing Table.
 - 2) Configure **Ciscoenpa55** as the encrypted password.
 - 3) Configure **Ciscolinepa55** as the password on the lines.
 - 4) All lines should accept connections.
 - 5) Configure an appropriate message of the day banner.
- b. Configure interface settings.
 - 1) Addressing.
 - 2) Descriptions on the interfaces.
 - 3) Save your configuration.

Step 2: Configure switch SW1 and SW2.

- a. Configure the default management interface so that it will accept connections over the network from local and remote hosts. Use the values in the addressing table.
- b. Configure an encrypted password using the value in step 1a above.
- c. Configure all lines to accept connections using the password from step 1a above.
- d. Configure the switches so that they can send data to hosts on remote networks.
- e. Save your configuration.

Step 3: Configure the hosts.

Configure addressing on the hosts. If your configurations are complete, you should be able to ping all devices in the topology.

Part 3: Post your screenshots

On the PT Activity window, make sure that the completion grade is **100%**. Click on the **Check Results** button and select the **Assessment Items** tab. Take a screen shot of the whole window, showing the table of assessment items, and the score/item count. Own your photo by placing a watermark on your photo with your name and USC ID Number. Paste your screenshot below:

The screenshot shows the Cisco Packet Tracer Activity Results window. The title bar indicates the file path: D:\inBus\1.6.1 Packet Tracer - Implement a Small Network.pka. The window has a menu bar (File, Edit, Options, View, Tools, Extensions, Window, Help) and a toolbar. The main area displays 'Activity Results' with a congratulatory message: 'Congratulations Danica Marie A. Dumalagan! You completed the activity.' Below this, there are tabs for 'Overall Feedback', 'Assessment Items', and 'Connectivity Tests'. The 'Assessment Items' tab is active, showing a table of assessment items. The table has columns for 'Assessment Items', 'Status', 'Points', 'Component(s)', and 'Feedback'. The items are organized into a tree structure under 'Network', including PC-1, PC-2, RTA, and SW1. Each item has a status of 'Correct' and a points value of 1. The 'Component(s)' column lists various components like 'Ip', 'Physical', 'Other', and 'Physical'. To the right of the table, there is a summary section showing 'Score : 49/49' and 'Item Count : 49/49'. Below this, a table shows the breakdown of scores by component: 'Ip' (16/16), 'Other' (16/16), and 'Physical' (17/17). A large watermark is overlaid on the right side of the screenshot, reading 'Danica Marie A. Dumalagan' and '18103276'. At the bottom right, there is a 'Close' button.

Assessment Items	Status	Points	Component(s)	Feedback
Network				
PC-1				
Default Gateway	Correct	1	Ip	
Ports				
FastEthernet0				
IP Address	Correct	1	Ip	
Link to SW1				
Connects to FastEthernet0/1	Correct	1	Physical	
Type	Correct	1	Physical	
Subnet Mask	Correct	1	Ip	
PC-2				
Default Gateway	Correct	1	Ip	
Ports				
FastEthernet0				
IP Address	Correct	1	Ip	
Link to SW2				
Connects to FastEthernet0/1	Correct	1	Physical	
Type	Correct	1	Physical	
Subnet Mask	Correct	1	Ip	
RTA				
Banner MOTD	Correct	1	Other	
Console Line				
Login	Correct	1	Physical	
Password	Correct	1	Other	
Enable Secret	Correct	1	Other	
Host Name	Correct	1	Other	
Ports				
GigabitEthernet0/0				
Description	Correct	1	Other	
IP Address	Correct	1	Ip	
Link to SW1				
Connects to GigabitEthernet0/1	Correct	1	Physical	
Type	Correct	1	Physical	
Port Status	Correct	1	Physical	
Subnet Mask	Correct	1	Ip	
GigabitEthernet0/1				
Description	Correct	1	Other	
IP Address	Correct	1	Ip	
Link to SW2				
Connects to GigabitEthernet0/1	Correct	1	Physical	
Type	Correct	1	Physical	
Port Status	Correct	1	Physical	
Subnet Mask	Correct	1	Ip	
Startup Config	Correct	1	Other	
VTY Lines				
VTY Line 0				
Password	Correct	1	Other	
SW1				
Console Line				

Component	Items/Total	Score
Ip	16/16	16/16
Other	16/16	16/16
Physical	17/17	17/17