

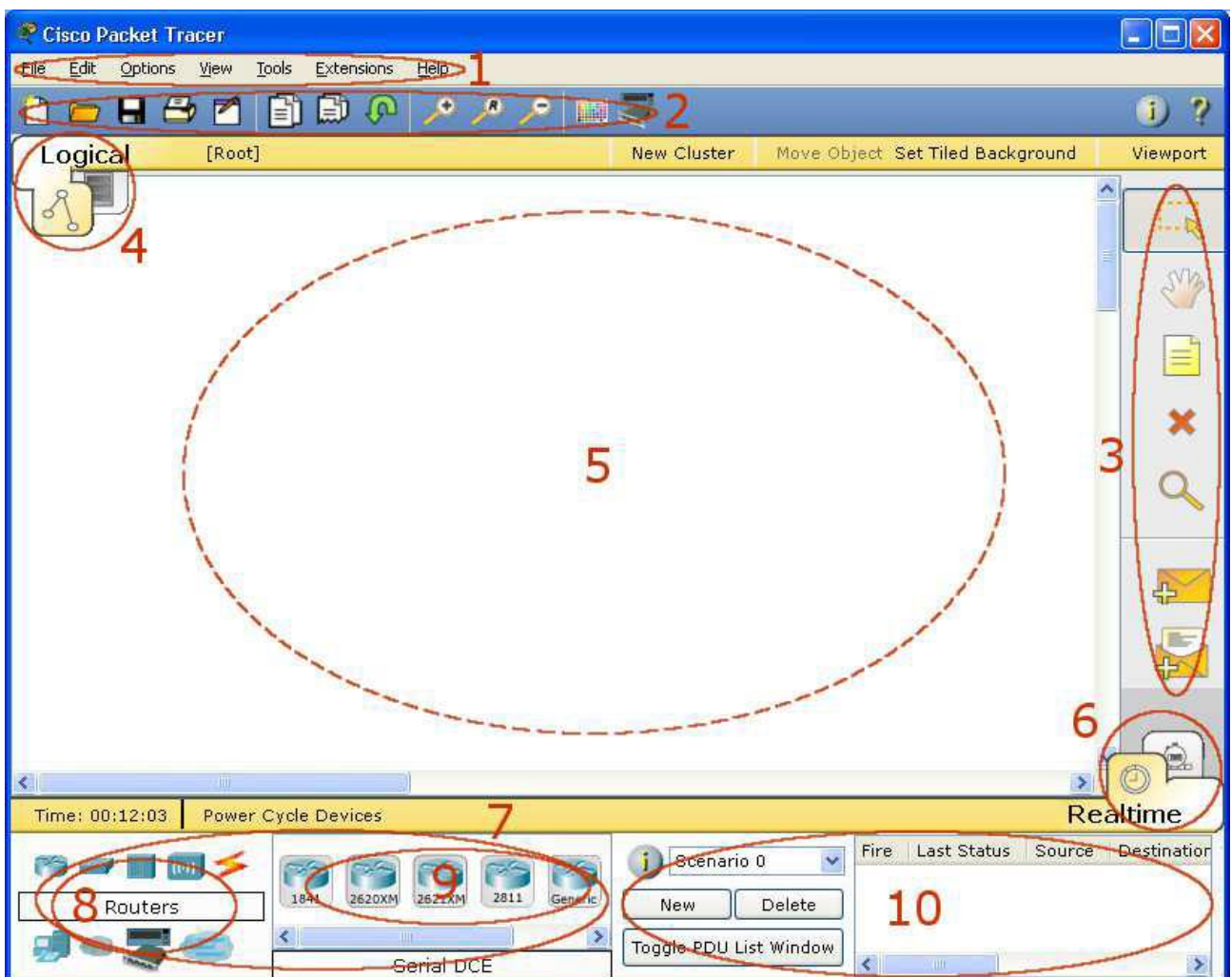
Introduction to Packet Tracer

I. Lab Objectives

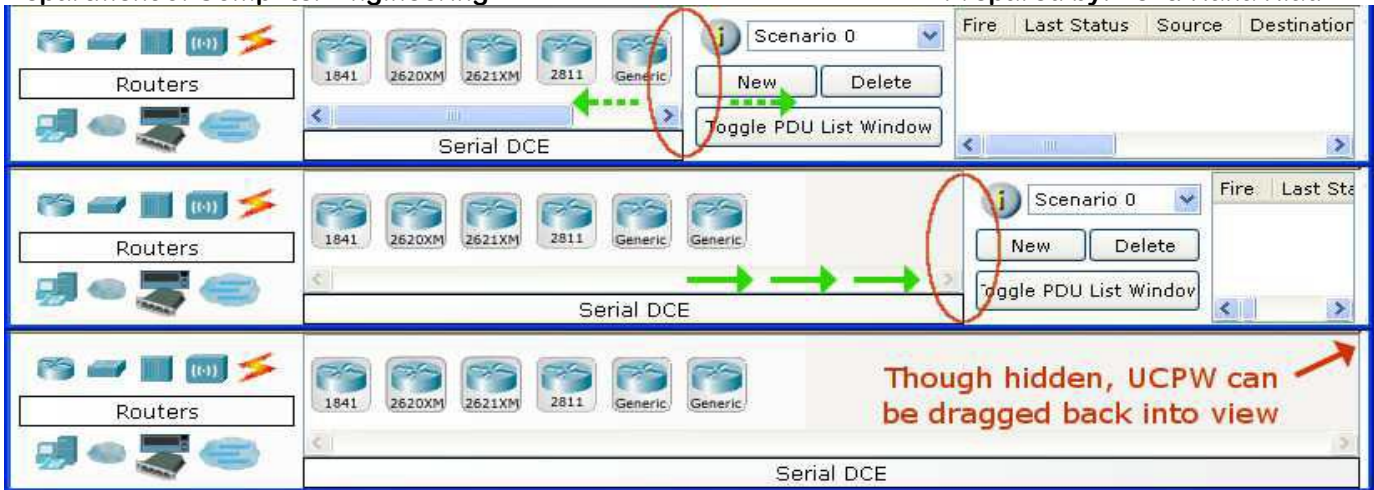
1. Cisco Packet Tracer 5.1 Overview
2. Creating Devices
3. Adding Modules
4. Making Connections
5. Creating Networks

II. Lab Content

1. Cisco Packet Tracer 5.1 Overview

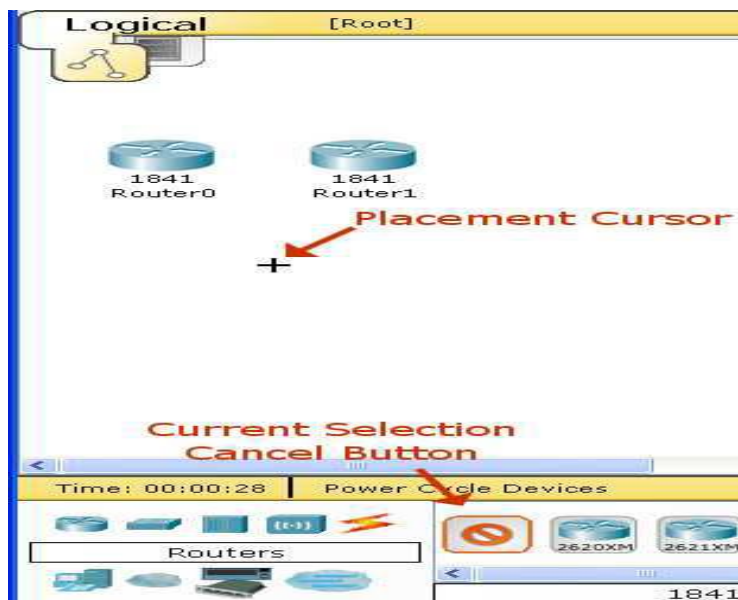


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| 1 | Menu Bar | This bar provides the File, Edit, Options, View, Tools, Extensions, and Help menus. You will find basic commands such as Open, Save, Print, and Preferences in these menus. You will also be able to access the Activity Wizard from the Extensions menu. |
| 2 | Main Tool Bar | This bar provides shortcut icons to the File and Edit menu commands. This bar also provides buttons for Zoom , the drawing Palette , and the Device Template Manager . On the right, you will also find the Network Information button, which you can use to enter a description for the current network (or any text you wish to include). |
| 3 | Common Tools Bar | This bar provides access to these commonly used workspace tools: Select, Move Layout, Place Note, Delete, Inspect, Add Simple PDU, and Add Complex PDU . See "Workspace Basics" for more information. |
| 4 | Logical/Physical Workspace and Navigation Bar | You can toggle between the Physical Workspace and the Logical Workspace with the tabs on this bar. In Logical Workspace, this bar also allows you to navigate through levels of a cluster, create a new New Cluster, Move Object, Set Tiled Background, and Viewport . In Physical Workspace, this bar allows you to navigate through physical locations, create a New City, create a New Building, create a New Closet, Move Object , apply Grid to the background, Set Background , and go to the Working Closet . |
| 5 | Workspace | This area is where you will create your network, watch simulations, and view many kinds of information and statistics . |
| 6 | Realtime/Simulation Bar | You can toggle between Realtime Mode and Simulation Mode with the tabs on this bar. This bar also provides buttons to Power Cycle Devices as well as the Play Control buttons and the Event List toggle button in Simulation Mode. Also, it contains a clock that displays the relative Time in Realtime Mode and Simulation mode. |
| 7 | Network Component Box | This box is where you choose devices and connections to put into the workspace. It contains the Device-Type Selection Box and the Device-Specific Selection Box. |
| 8 | Device-Type Selection | This box contains the type of devices and connections available in Packet Tracer 5.1. The Device-Specific Selection Box will change depending on which type of device you choose. |
| 9 | BoxDevice-Specific Selection Box | This box is where you choose specifically which devices you want to put in your network and which connections to make. |
| 10 | User Created Packet Window* | This window manages the packets you put in the network during simulation scenarios. See the "Simulation Mode" section for more details. |



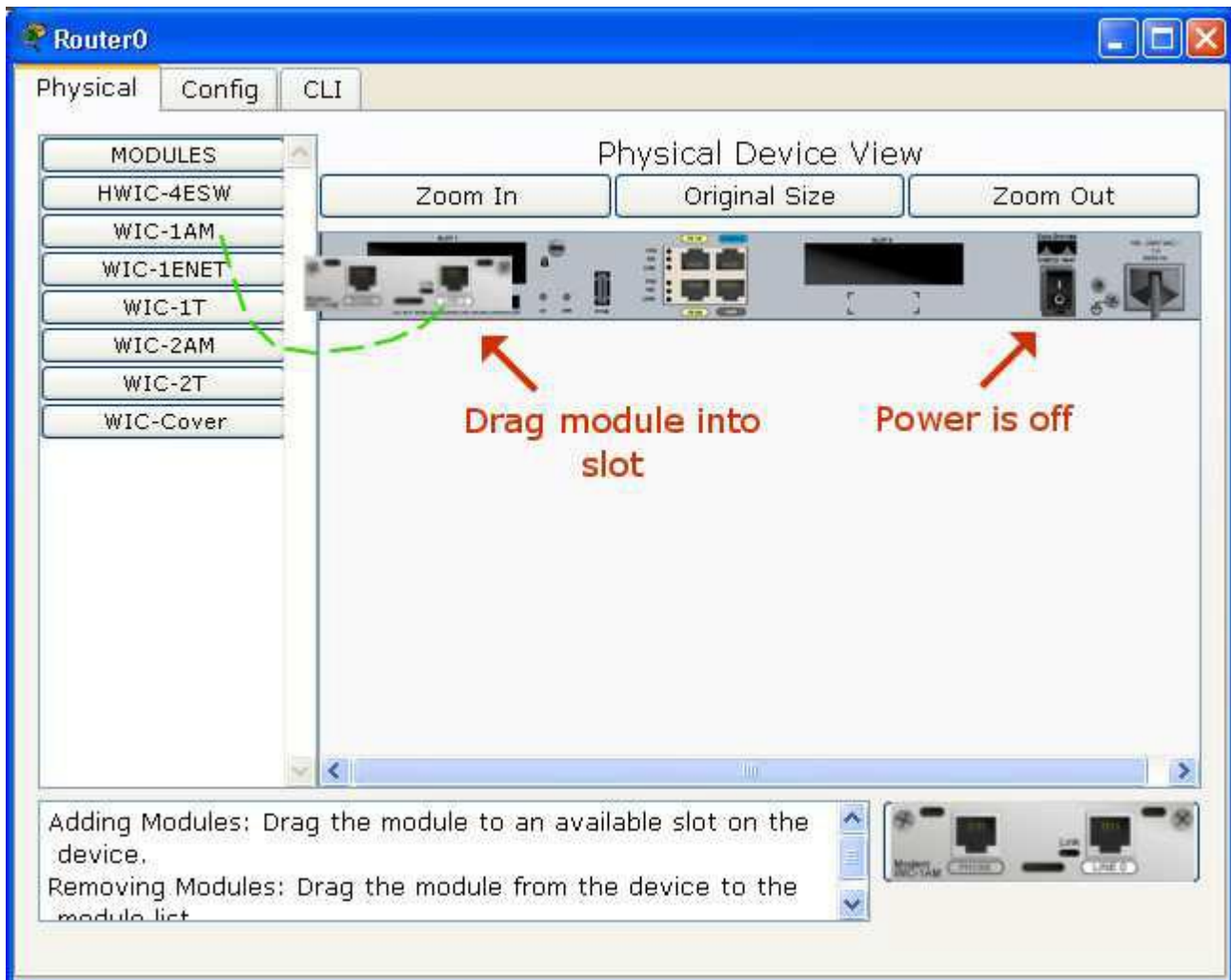
2. Creating Devices

- Choose a device type from the **Device- Type Selection** box
- Click on the desired device model from the **Device-Specific Selection** box.
- Click on a location in the workspace to put your device in that location.
- If you want to cancel your selection, press the **Cancel** icon for that device.
- Alternatively, you can click and drag a device from the **Device-Specific Selection** box onto the workspace.
- You can also click and drag a device directly from the **Device-Type Selection** box and a default device model will be chosen.



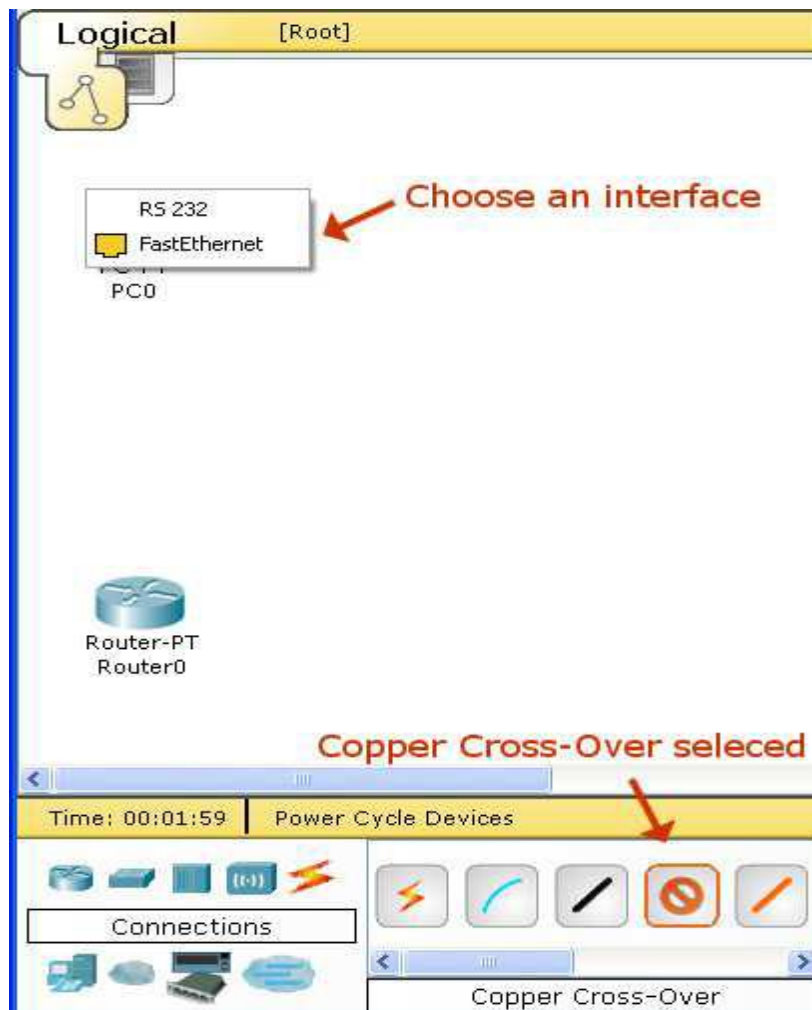
2. Adding Modules

- a. Click on a device to bring up its configuration window.
- b. By default, you will be in the **Physical Device View** subpanel of the device.
- c. You can browse (by clicking) through the list of modules and read their description in the information box at the bottom.
- d. When you have found the module you want to add, simply drag it from the list into a compatible bay on the device picture.
- e. You can remove a module by dragging it from the device back into the list.



3. Making Connections

- a. To make a connection between two devices, first click the **Connections** icon from the **Device-Type Selection** box to bring up the list of available connections.
- b. Then click the appropriate cable type.
- c. The mouse pointer will change into a "connection" cursor.
- d. Click on the first device and choose an appropriate interface to which to connect.
- e. Then click on the second device and do the same.
- f. A connection cable will appear between the two devices, along with link lights showing the link status on each end (for interfaces that have link lights).



5. Creating Networks

- a. Start creating a network by first selecting the End Devices. Add a Generic PC and a Generic Server to the workspace.
- b. Under Connections, select the Copper Straight-through cable (solid black line) and connect the devices with it. The red lights on the link indicate that the connection is not working. Now, use the Delete tool to remove the Copper Straight-through cable, and use a Copper Cross-over cable (dashed line) instead. The lights should turn green at this point, and if the mouse pointer is held over either the PC or the Server, the link status will be shown as “Up.” The network should look similar to the picture below.
- c. Click on the PC. While paying attention to the link lights, turn the power on, off, and on again. Follow the same steps for the server. The link lights turn red when the device is off. This means that the link is down or is not working. The link lights turn green when the device is turned back on.
- d. Try all three ways to learn about the devices. **First**, mouse over the devices to see basic configuration information about them. **Second**, click on each device with the Select tool to show the device configuration window, which provides several ways to configure the device. **Third**, use the Inspect tool to view tables the network device will build as it learns about the network around it. In this example, only the ARP tables will appear. Since the devices have not been configured yet, the ARP tables are empty. Always remember to close windows after viewing them or they will clutter the workspace.
- e. Open the PC configuration window and change the settings using the Config tab. Change the display name to Client and set the DNS server to **192.168.0.105**. Under Interface, click FastEthernet and set the IP address as **192.168.0.110**. Packet Tracer automatically calculates other parameters. Make sure that the Port Status box is checked. For future reference, note that other Ethernet interface settings, such as bandwidth, duplex, MAC address, and subnet mask can be modified using this window.
- f. Go to the Desktop Tab and click on IP Configuration. Notice that the IP address, subnet mask and DNS server can be changed here as well.
- g. Open the Server configuration window and go to the Config tab. Change the display name to Web Server. Click FastEthernet and set the IP address as 192.168.0.105. Make sure that the Port Status is also on. Click DNS and set the domain name as www.firstlab.com. Set the IP address as 192.168.0.105 and click **Add**. Finally, check to make sure that the service for DNS is on.
- h. Reposition the network devices by dragging them to a new location. Add a network description by using the “i” button on the upper right corner. Then add some text labels within the Logical Workspace by using the Place Note tool.
- i. Load a background grid using the Set Tiled Background button.
- j. Save your work using the File > Save As option and create a meaningful filename.

