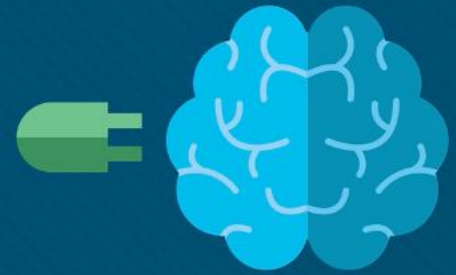

Module 3: Explore Networks with Packet Tracer

Networking Essentials (NETESS)

Module Objectives

Module Title: Explore Networks with Packet Tracer
Module Objective: Create a simulated network using Packet Tracer.

Topic Title	Topic Objective
Packet Tracer Network Simulator	Describe the purpose and function of Packet Tracer.
Packet Tracer Installation	Install Packet Tracer on a local device.
The Packet Tracer User Interface	Investigate the Packet Tracer user interface.
Packet Tracer Network Configuration	Configure a Packet Tracer network.

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3.1 Packet Tracer Network Simulator

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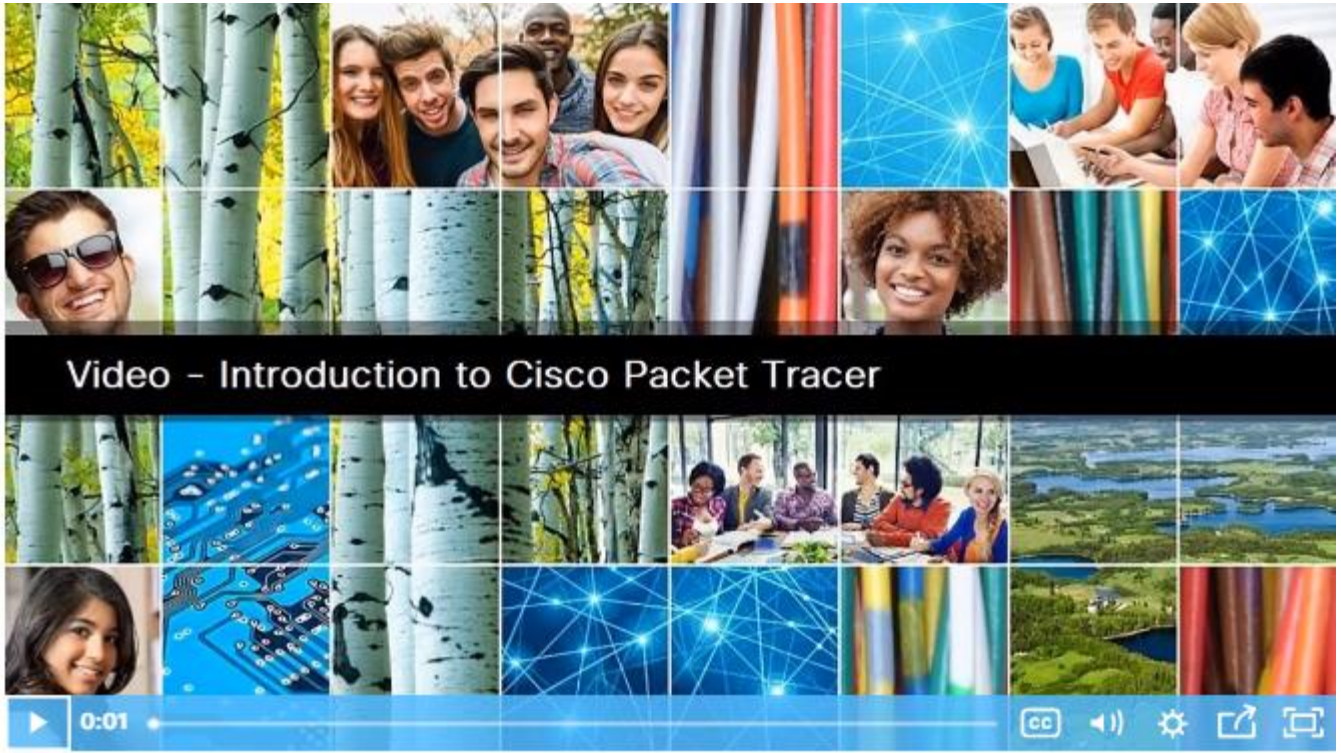
Video - Introduction to Cisco Packet Tracer



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3.2 Packet Tracer Installation

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Video - Download and Install Packet Tracer

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3.3 The Packet Tracer User Interface

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Video - Getting Started in Cisco Packet Tracer

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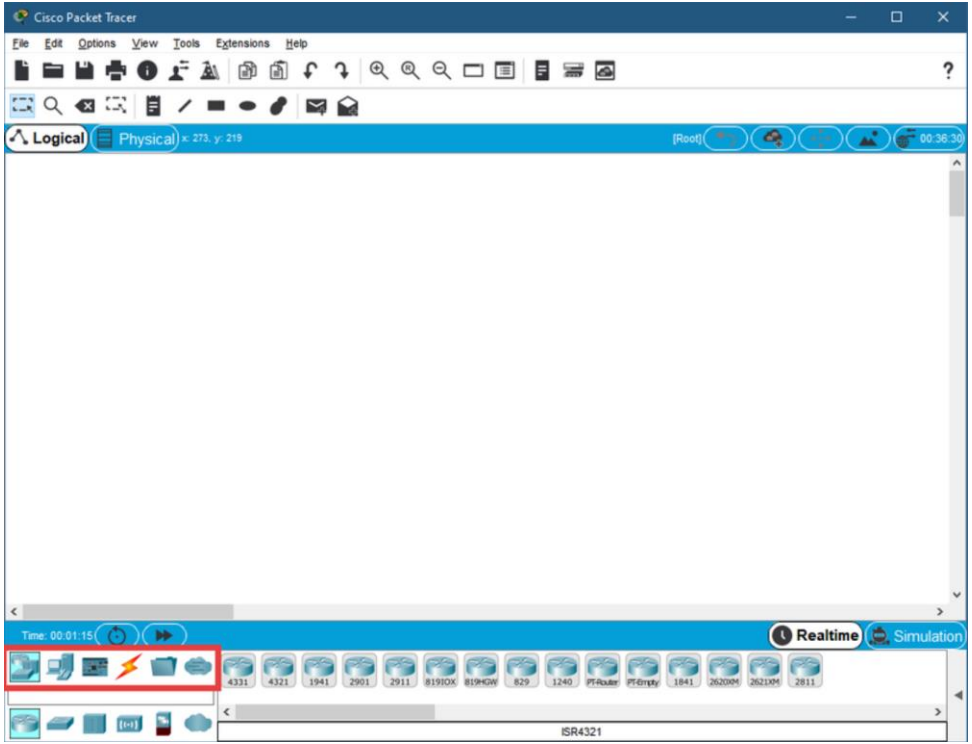
Locate and Deploy Devices

Packet Tracer simulates networks and network traffic, the physical aspects of these networks also need to be simulated.

Finding a device to deploy requires looking in the Device-Type Selection Box.

The top row of icons represents the category list consisting of: [Networking Devices], [End Devices], [Components], [Connections], [Miscellaneous], and [Multiuser]. Each category contains at least one sub-category group.



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Packet Tracer – Deploy Devices

In this activity, you will open a sample file, locate and deploy multiple devices, and then save the file.

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Packet Tracer – Deploy and Cable Devices

In this activity, you will locate, deploy, and cable multiple types of devices. You will then save the Packet Tracer file.

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3.4 Packet Tracer Network Configuration

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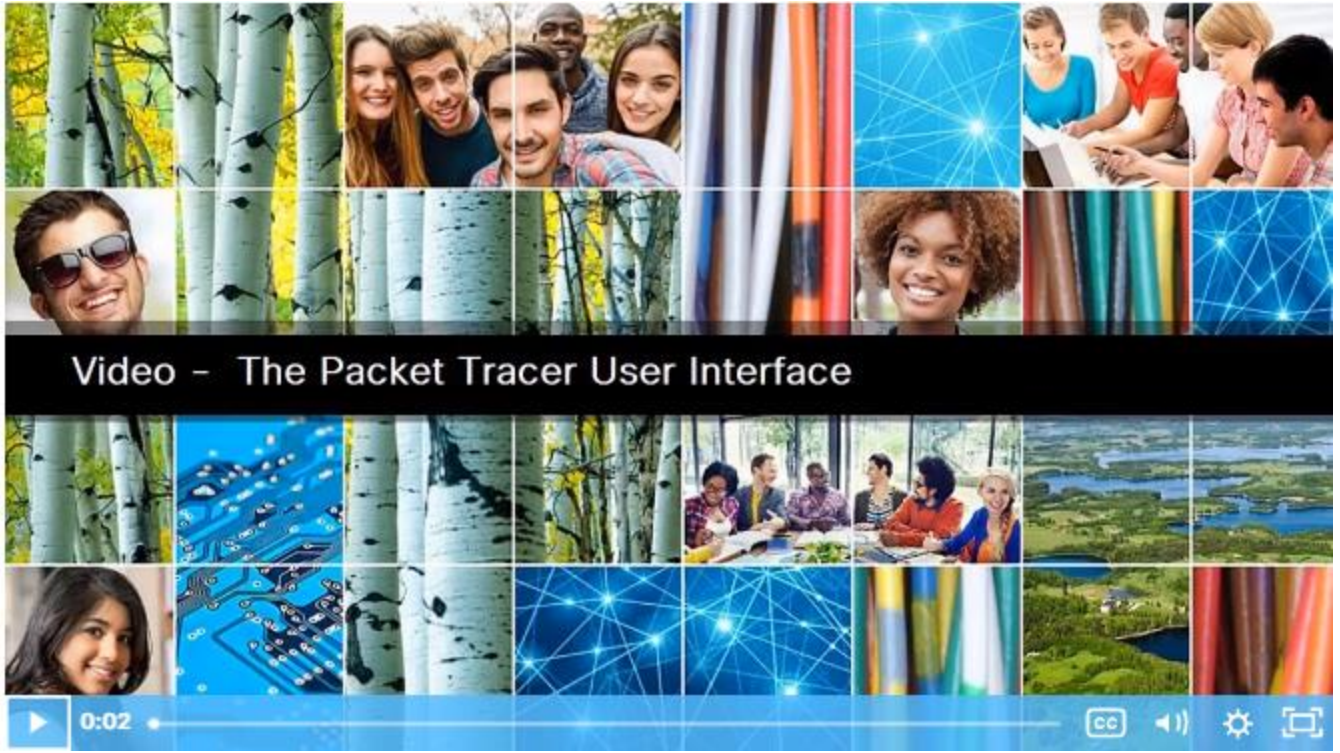
Video - Device Configuration in Packet Tracer



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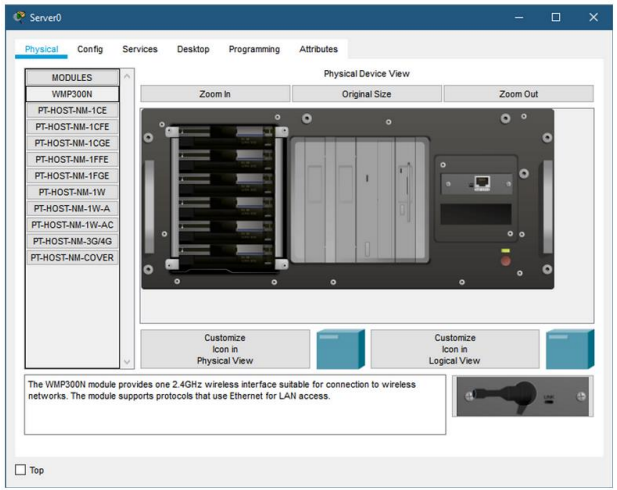
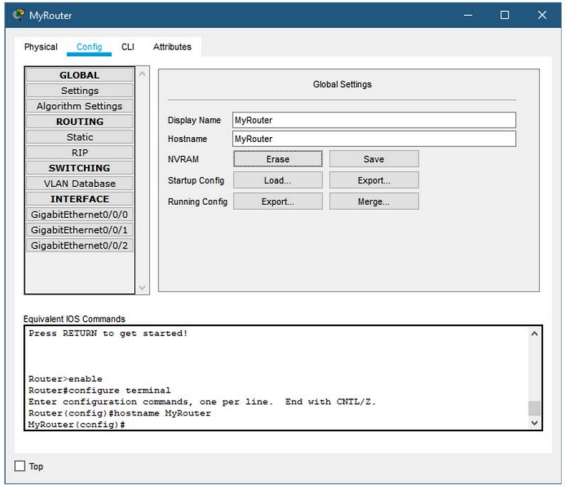
GUI and CLI Configuration in Packet Tracer

The Physical tab provides an interface for interacting with the device including powering it on or off or installing different modules, such as a wireless network interface card (NIC).



The Config tab is a learning tab in Packet Tracer. This tab provides a way to to do basic configurations. It will show the equivalent CLI commands that perform the same action if someone was configuring using the CLI tab.



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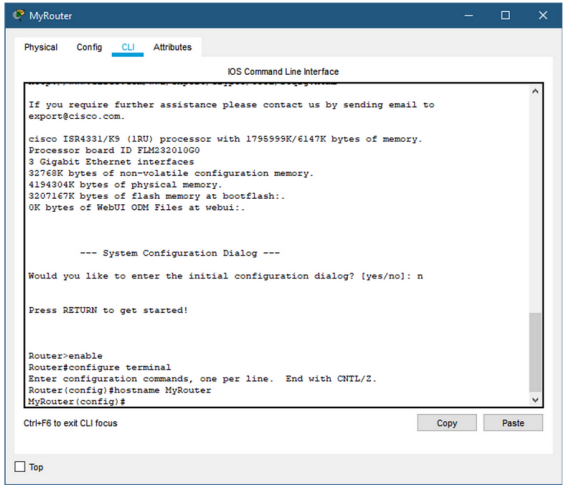
GUI and CLI Configuration in Packet Tracer (Cont.)

The CLI tab provides access to the CLI interface. Here, you can practice configuring the device at the command line.



For some of the end devices Packet Tracer provides a desktop interface that gives you access to IP configuration, wireless configuration, a command prompt, a web browser, and much more

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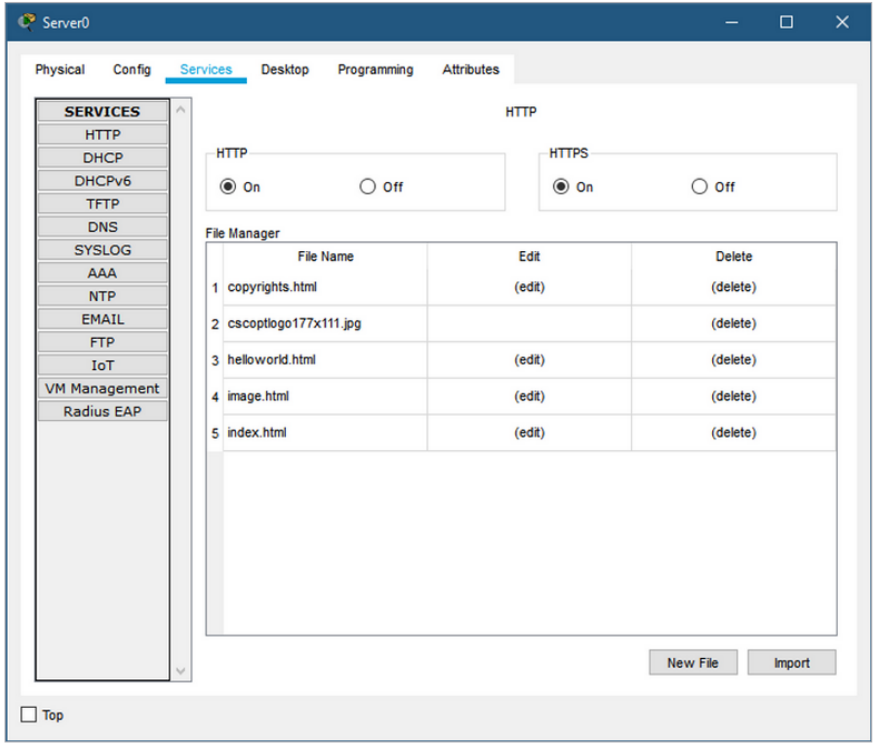
GUI and CLI Configuration in Packet Tracer (Cont.)

If you are configuring a server, the server has all of the functions of a host with the addition of one more tab, the Services tab. This tab allows a server to be configured as a web server, a DHCP server, a DNS server, or various other servers visible in the graphic.



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Packet Tracer – Configure End Devices

In this activity, you will construct a simple Packet Tracer network and complete basic configuration of end devices.

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3.5 Explore Networks with Packet Tracer Summary

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Packet Tracer – Create a Simple Network

In this activity, you will complete the following objectives:

Part 1: Build a simple network in the logical topology workspace.
Part 2: Configure the network devices.
Part 3: Test connectivity between network devices.
Part 4: Save the file and close Packet Tracer.

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What Did I Learn in this Module?

- Packet Tracer is a free n innovative network simulation and visualization tool to practice network configuration and troubleshooting skills.
- Packet Tracer is available for both the Linux and Windows desktop environments.
- Packet Tracer can be used to build a network from scratch, use a pre-built sample network, or complete classroom lab assignments.
- Packet Tracer provides an easy way to design and build networks of varying sizes without expensive lab equipment.
- How to download and install Packet Tracer.
- How to open a sample file, locate and deploy multiple devices, and then save the file.
- How to locate, deploy, and cable multiple types of devices. You will then save the Packet Tracer file.
- How to configure devices and components in a simulated network
- How to construct a simple Packet Tracer network and complete basic configuration of end devices.
- How to use the various tabs for device configuration. Such as Physical, Config, CLI, Desktop, and Services tabs.

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Explore Networks with Packet Tracer Summary

Module 3 – New Terms and Commands

- Packet Tracer
- Cisco Networking Academy
- Device-Type selection box
- configuration interface
- Physical tab
- Config tab
- CLI tab
- Desktop tab
- Services tab

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