

CISCO Packet Tracer

- We will use free network simulators to illustrate some of the networking concepts in ELEC3506/9506 - CISCO Packet Tracer.
- A virtual program is used to set up the appropriate connection, as it gives us a brief idea about the requirements for establishing a physical connection, such as hubs, switches, and routers.
- Prerequisites:
 - Laptop/Desktop
 - CISCO Packet Tracer program
- Setting Up: Follow the steps below to initiate the setup for the connection:
 - Step 1: Download Cisco Packet Tracer
 - Step 2: Run and install the setup (You will need to open Cisco Networking Academy Account and log in).
 - Step 3: After the installation procedure has been completed, you can then run the Cisco Packet Tracer-Start the application₁

CISCO Packet Tracer

Cisco Packet Tracer

File Edit Options View Tools Extensions Window Help

Logical Physical x: 552, y: 180

Root

Time: 00:00:09

Realtime Simulation

Scenario 0

New Delete

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit
------	-------------	--------	-------------	------	-------	-----------	----------	-----	------

PT8200 4331 4321 IR8340 1941 2901 2911 8191OX 819HGW 829 1240

CISCO Packet Tracer

- Simulation file (*.pkt) will be provided for students to play with
- A lot of information on the internet to learn
- ChatGPT is also a good source to learn networking and control it by using the Command Line Interface
- The unit specifically uses the simulator for concept illustration – students can further do exploration if interested

CLI Modes

The Three Main CLI Modes

Prompt Symbol	Mode Name	What You Can Do	Key Command to Enter
>	User EXEC	View basic status. No configuration allowed.	<i>Default mode when connecting</i>
#	Privileged EXEC	View all settings, test connections, and save data.	enable
(config)#	Global Configuration	Change global device settings and enter sub-modes.	configure terminal

Courtesy of ChatGPT

CLI Modes

Common Sub-Configuration Modes

When you are inside Global Configuration mode, you can dive deeper to change specific components: 

- **(config-if)#** (Interface Mode): Configures specific network ports. Enter using `interface <name>`.
- **(config-vlan)#** (VLAN Mode): Creates or edits VLANs. Enter using `vlan <number>`.
- **(config-line)#** (Line Mode): Configures passwords for console or remote access. Enter using `line con 0` or `line vty 0 4`. 

Courtesy of ChatGPT

Examples

Navigation Example

ios

Switch> enable	! Moves to Privileged EXEC mode
Switch# configure terminal	! Moves to Global Config mode
Switch(config)# interface vlan 1	! Moves to Interface sub-mode
Switch(config-if)# end	! Jumps all the way back to Privileged EXI
Switch#	

Use code with caution.



Courtesy of ChatGPT