

----- **Network Simulation** -----

Lab 1 : Simple Network Simulation on Cisco Packet tracer

Objective of the Lab: the objective of this first practice lab is to get started with a simple network simulation with packet tracer simulator.

- Step 1: Create a network composed of one server and four clients (PCs) and interconnect them.
- Step 2: Configure the network (assign IP addresses to each entity).
- Step 3: Move to simulation mode.
- Step 4: Generate Web traffic on PC0
- Step 5: Generate FTP traffic on PC1
- Step 6: Generate Email traffic on PC2
- Step 7: Generate DNS traffic on PC3
- Step 8: Launch the simulation and visualize the exchanged traffic
- Step 9: Display the packet format at transport layer for each traffic type.

Answer the following questions:

1. What is this simulator made of ?
2. Does this simulator include emulators?
3. Is the network simulation close to reality?
4. Can you integrate a new protocol into the simulator?
5. Are you able to modify an existing protocol?
6. Can you specify a programmed simulation scenario on packet tracer simulator?

References

[How to Create Web Server On Packet Tracer? - GeeksforGeeks](#)

[Packet Tracer - Connect to a Wireless Network \(netacad.com\)](#)

[How to configure wireless network in packet tracer \(computernetworkingnotes.com\)](#)

[9.3.1.2 Packet Tracer Simulation - Exploration of TCP and UDP Communication Answers \(itexamanswers.net\)](#)