Packet Tracer - Network Representation

# Objectives

The network model in this activity incorporates many of the technologies that you will master in your CCNA studies. It represents a simplified version of how a small to medium-sized business network might look. Feel free to explore the network on your own. When you are ready, proceed through the following steps and answer the questions.

**Note**: It is not important that you understand everything you see and do in this activity. Feel free to explore the network on your own. If you wish to proceed more systematically, follow the steps below. Answer the questions to the best of your ability.

# Instructions

## Identify common components of a network as represented in Packet Tracer.

The icon toolbar at the bottom left hand corner has various categories of networking components. You should see categories that correspond to intermediary devices, end devices, and media. The **Connections** category (with the lightning bolt icon) represents the networking media supported by Packet Tracer. There is also an **End Devices** category and two categories specific to Packet Tracer: **Custom Made Devices** and **Multiuser Connection**.

### Questions:

List the intermediary device categories.

Routers

Switches

Hubs

Wireless

Devices

WAN Emulation

Without entering into the internet cloud or intranet cloud, how many icons in the topology represent endpoint devices (only one connection leading to them)?

15

Without counting the two clouds, how many icons in the topology represent intermediary devices (multiple connections leading to them)?

11

How many end devices are **not** desktop computers?

8

How many different types of media connections are used in this network topology?

4

## Explain the purpose of the devices.

### Questions:

* + - 1. In Packet Tracer, only the Server-PT device can act as a server. Desktop or Laptop PCs cannot act as a server. Based on your studies so far, explain the client-server model.
      2. Desktops and laptops cannot ac as a server because they are clients and they share resources to other devices.
      3. List at least two functions of intermediary devices.
      4. Notify other devices on failure, mac filtering

Type your answers here.

* + - 1. List at least two criteria for choosing a network media type.
      2. The environment where the system is installing and the distance can the signal carry.

Type your answers here.

## Compare and contrast LANs and WANs.

### Questions:

* + - 1. Explain the difference between a LAN and a WAN. Give examples of each.
      2. A local area network is for small organizations like offices and schools and wide area networks are used for large business and industries.
      3. In the Packet Tracer network, how many WANs do you see?
      4. 2
      5. How many LANs do you see?
      6. 3
      7. The internet in this Packet Tracer network is overly simplified and does not represent the structure and form of the real internet. Briefly describe the internet.
      8. internet is for sharing resources from various server to server and an interconnection of various network
      9. What are some of the common ways a home user connects to the internet?
      10. Dial up , wifi, fiber cable
      11. What are some common methods that businesses use to connect to the internet in your area?
      12. Satellite, wifi , celular etc