

CCNA Exploration: Network Fundamentals

Chapter 1 Case Study

Intro: The globalization of the Internet has succeeded faster than anyone could have imagined. The manner in which social, commercial, political and personal interactions occur is rapidly changing to keep up with the evolution of this global phenomenon.

Definition 1: Three main characteristics define a simple computer: 1. it must have a CPU; 2. it must have memory; 3. It must have an I/O device.

Definition 2: Computers which are interconnected and communicate with each other (sending and receiving information) are said to be components of a computer network.

Task 1: Based on these definitions look around you and name the different computer networks you see. Show examples of how the device fits on the definitions 1 and 2.

Hint: A Digital Satellite Home Cable Box (cable TV device) is a computer. 1. it has a CPU to process information, encode and decode the signal; 2. It has memory (to store the system running on the TiVo) and the remote control and the TV itself could be seen as I/O devices). Since it is connected and exchanges info with a central office (via satellite), it is part of a network.

Task 2: List the devices around you are not currently part of a computer network?

A1. DVD player, Microwaves, fridge, stove, iron, hair dryer, mixer, coffee machine, etc

Task 3: Could you create different types of networks to interconnect such devices? List the "new" computer networks you were able to create and give some details about. *Hint:* A coffee machine could be interconnected with a TV and programmed to brew some coffee every time the TV was first turned on after 6 pm on weekdays.

A2. Answers will vary