NETWORKING & SYSTEM ADMINISTRATION LAB

Name: Alan T Jim

Roll No:14

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Experiment No.: 1

Aim

Identify the major components of computer system such as : mother board , RAM modules ,Daughter cards , bus slots ,SMPS ,Internal storage devices ,Interfacing ports

Procedure

1.Motherboard:

A mother board (also called mainboard) is the main circuit board in a computer . It helps for the communication between different electronic devices inside the computer. It includes the central processing unit , the peripherals etc. It contains subsystems like central processor ,input/output memory controllers and other components for general use. Like the name , the all other components are connected to it .

Phones ,tablets and other small devices also have motherboards , but they are often called logic boards instead. Their components are usually soldered directly onto the board to save space , which means there aren't any expansion for upgrades like in desktops

2.Ram Modules:

A narrow printed circuit board that holds memory chips. The common arcitechture for computers is the dual in-line memory module,which transfer 64 bit at a time . Because of the space limitation, laptops use small outlineDIMMs. The modules are keyed with notches in different places so they cannot be inserted into the wrong slots.

Most desktop and laptop computers use RAM chips that hold eight bits per byte. While high-end servers and workstations typically have nine bits. The ninth bit is a parity bit for detecting errors

3.Daughters cards:

A daughterboard (or daughter board, daughter card , or daughtercard) is a circuit board that plugs into and extends the circuitry of another circuit board. The other circuit board may be the computer's main board (its motherboard) or it may be another board or card that is already in the computer, often a sound card. The term is commonly used by manufacturers of wavetable daughterboards that attach to existing sound cards.

4.Bus slots:

Alternatively known as a bus slot or expansion port, an expansion slot is a connection or port inside a computer on the motherboard or riser card. It provides an installation point for a hardware expansion card to be connected. For example, if you wanted to install a new video card in the computer, you'd purchase a video expansion card and install that card into the compatible expansion slot.

5.SMPS:

The full form of SMPS is Switched Mode Power Supply also known as Switching Mode Power Supply. SMPS is an electronic power supply system that makes use of a switching regulator to transfer electrical power effectively. It is a PSU (power supply unit) and is usually used in computers to change the voltage to the appropriate range for the computer.

6.Internal storage devices:

Some storage devices are classed as 'internal' which means they are inside the computer case. Most computers have some form of internal storage. The most common type of internal storage is the hard disk. At the most basic level, internal storage is needed to hold the operating system so that the computer is able to access the input and output devices. It will also be used to store the applications software that you use and more than likely, the original copies of your data files.

Internal storage allows the data and applications to be loaded very rapidly into memory, ready for use. The data can be accessed much faster than data which is stored on an external storage device. This is because internal storage devices are connected directly to the motherboard and its data bus whereas external devices are connected through a hardware interface such as USB, which means they are considerably slower to access.

7.Interfacimg ports:

A computer is a device that transforms data into meaningful information. It processes the input according to the set of instructions provided to it by the user and gives the desired output. As we know that we can connect multiple external devices with the computer system. Now, these devices are connected with the computer using Ports. The ports are the physical docking points present in the computer through which the external devices are connected using cables. Or in other words, a port is an interface between the motherboard and an external device of the computer.

Experiment No.: 2

Aim

Prepare a comparative study of specification of desktop and server class computer

Procedure

Desktop	Server
Supports only single user	Supports multiple users
Cannot run large number of different services and application	Can run large number of different services and application
Files are saved in individual computer storage. And it can become disjointed	Files are saved in one secure location
Software updates and changes must be implemented one machine at a time	Easily rollout new software or make changes across the network
Single hard drive-data is lost if the drive falls	Incoporates mirrored hard drives- data can be recovered if one drive failes
Uses a single processor in most cases	Multiple processors and more cache for fast file access
Only has one power supply	More than one power supply
Individual machines may be vulnerable to virus and malware	Block viruses and access to suspect websites by routing internet access via the server