NETWORKING & SYSTEM ADMINISTRATION LAB

Name: APARNA K MANOJ

Roll No:32

Batch: Regular MCA

Date:

Experiment No.: 2

Aim

Prepare a comparative study of specifications of desktop computers and server class computers.

Procedure

Desktop Computers

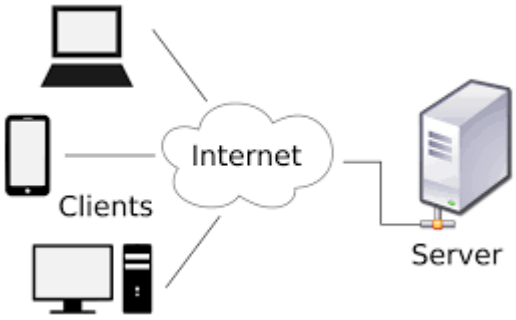
A desktop computer (or desktop PC) is a computer that is designed to stay in a single location. It may be a tower (also known as a system unit) or an all-in-one machine, such as an iMac. Unlike laptops and other portable devices, desktop computers cannot be powered from an internal battery and therefore must remain connected to a wall outlet.

In the early age of computers, desktop computers were the only personal computers available. Since laptops and tablets did not exist, all home PCs were desktop computers. Still, the term "desktop computer" was used back then to differentiate between personal PCs and larger computers, such as mainframes and supercomputers.

While desktop computers were the most popular type of personal computer for several decades, in recent years, laptop sales have surpassed those of desktop PCs. Because of the rise in mobile computing, this trend is likely to continue. However, desktop computers remain the most popular choice for business workstations and family computers.

Server Class Computer

Designating a computer as "server-class hardware" implies that it is specialized for running servers on it. This often implies that it is more powerful and reliable than standard personal computers, but alternatively large computing clusters may be composed of many relatively simple, replaceable server components.



The term server refers to a computer program or process (running program). Through metonymy, it refers to a device used for (or a device dedicated to) running one or several server programs. On a network, such a device is called a host. In addition to server, the words serve and service (as verb and as noun respectively) are frequently used, though servicer and servant are not.[a] The word service (noun) may refer to either the abstract form of functionality, e.g. Web service.

Alternatively, it may refer to a computer program that turns a computer into a server, e.g. Windows service. Originally used as "servers serve users" (and "users use servers")in the sense of "obey", today one often says that "servers serve data", in the same sense as "give". For instance, web servers "serve [up] web pages to users" or "service their requests".

Comparison between server and desktop computer

Server class computer	Desktop computer
• Multiple processor handles heavy work loads	• Mostly single processor for smaller applications.
• Large storage from terabyte to petabyte	• Less storage from gigabytes to terabyte.
• Multiple network and power source with N+1 redundancy.	• Single network and power source from UPS.
• Mirrored storage and RAID mode and remote backup.	• Single storage device and data is lost on device failure.

Recommended specifications for new personal computer purchases

1.Processor:10th or 11th Gen Intel Core i5, i7 or i9 Processor, or Apple M1 Processor(CPU)

2. Operating System: Microsoft Windows 10 Home, Pro, Enterprise or Education version or macOS 10.15.X "Catalina" or 11.X "Big Sur."

3. Memory (RAM):8-16 GB of RAM

4. Storage:240 GB solid state drive, or larger.

5. Video/Graphics: Integrated or Discrete graphics processor capable of 1440 X 900 resolution, or better (1920 X 1080 or 1200 ideal).

6. Monitor:for notebook: 13″ – 17″ display

for desktop: 19″ – 27″ widescreen flat-panel display

7. Mouse: Built-in or external trackpad, wireless and/or USB, 2-button, optical mouse

8. Sound: Sound card or built-in audio, and speakers

9. Network:802.11ac Wi-Fi capability.

10. Backup device/scheme: External USB or Thunderbolt drive with Time Machine (Mac) or Windows backup software and/or cloud backup service/subscription.

Server Computer Specification

Hardware Requirements

- Requires an analog display (6312, 6314, 6317, 6318, 6319, 6324, 6325, 9524, 9525, or equivalent) for system setup and service

Software Requirements

The following IBM operating systems/extensions support the PC Server 300:

- OS/2 2.1 and OS/2 2.11.
- OS/2 LAN Server 3.0 Entry
- OS/2 LAN Server 3.01 Advanced
- OS/2 Extended Services for OS/2 V1.0
- OS/2 Network Transport Services/2 V2.1
- PC DOS 6.1 and 6.3