

NETWORKING & SYSTEM ADMINISTRATION LAB**Name: Aswathy Babu****Roll No:39****Batch:A****Date:20-03-2022****Experiment No.: 1****Aim**

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

Procedure

Many people mistakenly believe that a server is no different from a typical desktop computer. This couldn't be further from the truth. While almost any computer that meets the minimum hardware requirements can run a server operating system that alone does not make a desktop computer a true server. Even if the desktop computer had similar processor speeds, memory and storage capacity compared to a server, it still isn't a replacement for a real server. The technologies behind them are engineered for different purposes.

Desktops

A Desktop is a personal computer that an individual uses for personal or office work. It typically stays on your office desk at the workplace. It has a combination of physical hardware attached, which makes a desktop computer run. You have a monitor, keyboard, and mouse as input devices. Desktop computers are not only bought and used by an individual, they are also used in enterprise organizations where the desktops are assigned to the employees. Multiple employees cannot work on one Desktop, but one employee can have multiple desktops assigned to him/her depending on the work.

The processor is the most crucial part of a Desktop. It includes the motherboard and the circuit board for the computer to run. A desktop computer processor can be a micro tower or a minitower, which can be placed over the work desk or under it. Hewlett Packard 9100A was the first desktop computer that was introduced in 1968. And since then, many desktop computers have been produced. Even kids have a desktop computer of their own today, which is often used for playing games.

Server

Servers are now used by companies for providing uninterrupted experiences to their customers. The devices that are linked to a server are called clients. Servers are used to share resources or carry out computational tasks for the client devices connected to them. Clients are normal devices like mobile phones and PCs. Servers can connect with many clients.

A client device can make a connection with a server by sending a request to it. The server process this request and respond. File servers are used in transfer and web servers can be used in any computer device. There are various uses of a server in computing. The major function is to share or transfer resources. Servers are the backbone of today's innovation and modernization.

Servers are essential in every application we use on our mobile phones and laptops. Database servers are crucial for maintaining large databases. Spreadsheets use this type of server. Gaming servers let several gamers use different devices to play the same multiplayer games. Email servers help in faster and better communication. Web servers help the websites work. The client in this case is the device with a browser.

Servers of larger search engines and websites like Google and Amazon should be run with no interruptions. These servers are maintained in specialized data centers. Data centers are provided with an uninterrupted power supply, security, and a good internet source. Heat generation is a major drawback of server rooms. So they are air-conditioned and data centers are placed near river banks.

Main Differences Between PC and Server

1. PC is a device used by normal people for personal uses but, a server is a program that connects a device with another source
2. PC is common and used by most people. Servers for large databases are maintained in specialized data houses
3. PC is simple to work with and are made for normal man usage while servers are complex to deal with
4. PC does not involve very advanced technology but, servers are developed with highly advanced technology
5. PC is used by people to store data and to send it to others while the server paves the portal to send this data.

Conclusion

A personal computer is widely useful for many activities. They are helpful to browse and search on the internet, communicate with loved ones, it is also applicable for educational purposes, processing and analyzing businesses data is also made easier with PC, it also serves as a great source for entertainment. PC is used to stream movies on web platforms.

The large server is maintained in data centers built on acres of land. They use a large amount of energy and generate heat. However, cooling techniques are used to cool down the building. Coolants are used to deal with the heat generated in server rooms. The server is one of the essential requirements for the PC to work.