Name: Anitta Varghese

Roll No:26

Batch: A

Date: 20/03/2022

NETWORKING & SYSTEM ADMINISTRATION LAB

Experiment No.: 2

<u>Aim</u>

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

Procedure

Desktop Computers

It is a computer device or program utilized by an end user or an individual for personal use. Hence it requires minimum hardware that makes it cost effective.

Example: Accounting, Entertainment, Surfing Web, Spreadsheets etc....

Now, we are going to discuss about "Difference between Server and Personal Computer".

Personal Computer is a device for small tasks for an individual or a user. Due to <u>less</u> <u>hardware requirements</u>, it makes them <u>inexpensive</u>. That is why PC's design depends on the user's usage. Therefore, <u>PCs</u> are for personal use or for a small group of individuals(office). As a result, Personal Computers are enough for specific limited applications only. Compared to servers only typical <u>broadband connection is enough</u>. When it comes to power supply single source with a UPS (Uninterrupted Power Supply) is enough. Moreover, even <u>single power source is enough</u>. But <u>no need of typical setup like cooling and large</u> space needed.

Server computers

It is a computer device or program that serves content or files over network. In a brief servers do the task of serving data to clients connected over internet.

Example: Mail Server, File Server, Web Server, Game Server etc....

Server is a device which contains program that serves data over internet to its clients. Therefore, server manages the data over the internet. Servers <u>can handle heavy workload</u> and used for multitasking purpose. So, the <u>hardware equipments used in the servers are highly compatible</u> with each other. That means it has higher throughput between internal hardware. Servers are for small scale business, large scale business and also for some of home purpose. So, to handle such huge data we <u>use large storage disks</u>. To help <u>prevent data loss</u> we use <u>RAID/remote backup</u>. Servers tolerate heavy vibrations i.e caused by hard disk's, cooling systems and neighbouring servers within the rack. Also, server's <u>need to be powered 24/7</u>. So, to keep them always on we use <u>redundant power supply</u> to connect multiple power sources. Similarly <u>multiple internet leased lines</u> come into action for <u>redundancy</u>.

Key Differences between Server and Personal Computer

Server:

- Need redundant power supply and internet connectivity.
- Requires enterprise hardware for reliability.
- Supports multiple processors.
- Needs large chillers to cool down servers.
- Handles large data with remote backup.

Personal Computer:

- For individual/small group use only.
- Battery backup like UPS is enough.
- Nominal Hardware fulfils the requirement.
- Very cheap to build.
- No need of heavy cooling equipment.