

Linux Operating System

Kiran

KCL-IMT, Jalandhar, India

Abstract— Linux Operating system is used in everywhere like in cars, smart phones, home appliance etc. [1] Before the platform to run desktops, server across the globe, it was the most secure, reliable, easy to use operating system. It is the most popular version of UNIX Operating System. Linux is open source OS, its code is free and it means that anyone can use it or modify the OS according to his / her requirements. **Objective** : The goal of our study is to gain an understanding of the main challenges any person face in practice when they work with Linux Operating System and they feel that it is the though or complex Operating System to use. **Method**: I can understand the topic of Linux OS from different – different books or from internet then I can write the information about Linux OS which is helpful to many people to understand the Linux OS and its features also. **Results**: This article is very helpful to those peoples who has interested to know about the Linux OS.

Key words: Linux, Operating System

I. INTRODUCTION

LINUX is an operating system like window XP, window 7, window 8, and MAC Operating System X. Linux OS is a computer operating System and also known as GNU / LINUX. The Operating System and the software used in it are developed by the volunteers, employees work in companies or in organisation's.

This Operating System is free to use for everyone and everyone has a freedom to use it. It could run on any computer and needed only small pieces of code called kernel[2].

Linux is used for a large network system and it is based upon UNIX system. It is the most interesting Operating System in now a days.

An operating system is software that manages all of the hardware resources associated with your desktop or laptop.

II. WHO DEVELOP THE LINUX?

LINUX is an operating system or a kernel which is generated as an idea in the mind of bright and young student of computer science Linus Torvalds[3] in 1991. He work on UNIX OS and he wanted to improved it further.



Fig. 1: Linus Torvalds

But unfortunately, the designers of UNIX OS, can rejected his suggestions. Then he thought that launching that type of operating system which will easily modify, receptive to changes according to the suggestions of the users.

A. The OS is Consist of Following

The kernel: This is actually called “Linux”. The kernel is the core of the system and manages the CPU, memory, and peripheral devices. The kernel is the “lowest” level of the OS[4].

The Bootloader: The Bootloader is a software that can manages the boot process of our computer system. The boot processing is known as Bootstrapping, which means that starting up of a computer system. During the process of bootstrapping (starting up of a computer), the kernel is loaded into the memory of the computer system.

1) Daemons

These are background services like printing, sound, scheduling, etc. that are startup / or runs during the process of booting, or after you log into your desktop.

2) The Shell

Shell is that type of interface where the user can works through typing the commands in text interface. This is also called Command line interface. The shell can allow the user to control his / her computer via just typing the commands into a text interface.

3) Desktop Environment

The user can interact with the can supports their installation on any kind of hardware platform.

4) Reliabilty

Linux is reliable OS because of better Background Processes. When a background process is enabled or start or run in the Linux OS, the OS will only use it for as long as it needs to and then disable or stopped it until needed again [6].



Fig. 2: Reliability of Linux OS

5) Multiuser

Multiusers means that more than two users can works Linus OS on the same time. The multiple users can also access the resources of computers, RAM, memory etc.

6) Multiprogramming

Multiprogramming means that in Linux OS, multiple programs can run at same time on one system.

ACKNOWLEDGEMENT

This work was supported in part by the Institute for KCL
Institute of Management & Technology, Jalandhar.

REFERENCES

- [1] <https://www.linux.com/what-is-linux>
- [2] <https://www.engineersgarage.com/tutorials/introduction-linux-part-115>
- [3] <https://www.guru99.com/introduction-linux.html>
- [4] <https://www.linux.com/what-is-linux>
- [5] <https://www.linux.com/what-is-linux>
- [6] <https://www.pcmec.com/article/why-is-linux-reliable/>

