Deliverable 1

Introduction

Ubuntu server is a server operating system,developed by **Canonical** and open source programmers from around the world.Ubuntu is a server that anyone can use.Its free available with both community and professional.It can serve up website,file shares and containers as well .

Project hardware and software requirements

Ubuntu 20.04 server edition provides a common,minimalist base for a variety of server applications,such as file/print services,web hosting ,email hosting etc.This version supports four 64 bit architectures:

- amd64(Intel?AMD 64-bit)
- arm64(64-bit ARM)
- ppc64el(POWER8 and Power9)
- s390x (IBM Z and LinuxONE)

System requirements are:

- CPU: 1 gigahertz or better
- RAM: 1 gigabyte or more
- Disk: a minimum of 2.5 gigabytes
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What is Linux?

Linux is the best-known and most-used open source operating system.It is supported on almost every major computer platform,including x86,ARM and SPARC.Its directly manages a systems hardware and resources like CPU,memory and storage.

Short history of linux

Linux began in 1991 as a personal project.Its create a new free operating system kernel.The resulting **Linux kernel** has been marked by constant growth throughout its history.In the Linux community,different

organizations have combined the available components differently.

> The **history of Linux** began in 1991 with the commencement of a personal project by <u>Finnish</u> student <u>Linus Torvalds</u> to create a new free operating system kernel. Since then, the resulting <u>Linux kernel</u> has been marked by constant growth throughout its history. Since the initial release of its <u>source code</u> in 1991, it has grown from a small number of <u>C</u> files under a license prohibiting commercial distribution to the 4.2.3 version in 2015 with more than 18 million lines of source code under the <u>GNU General Public License</u> v2.
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> ## THE CREATION OF LINUX
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> Linus Torvalds in 2002
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> In 1991, while studying <u>computer science</u> at <u>University of Helsinki</u>, Linus Torvalds began a project that later became the <u>Linux kernel</u>. He wrote the program specifically for the hardware he was using and independent of an operating system because he wanted to use the functions of his new PC with an 80386 processor. Development was done on MINIX using the <u>GNU C</u>

Linux distribution

- **Slackware**:slackware a oldest linux distribution .Linux operating system designed with the twin goals of ease of use and stability as top priorities.Slackware Linux provides new and experience users alike with a fully featured system.

- **Debian**: Debian is an operating system and a distribution of Free Software.The debian project is a community of developers and users that maintain the GNU OS based on open source software.

> **Debian based Linux Distribution** Ubuntu:Ubuntu is a linux distribution based on Debian.It is developed by Canonical and community of developers.It has three official editions desktop,server and core. Kali Linux: Kali linux is an open source.Debian based Linux distribution geared towards various information security tasks,such as Penetration testing,Security Research,Computer Forensics.

- Red Hat Enterprise Linux: Is a commercial Linux distribution developed by Red Hat.It has a server version and a desktop version.Red Hat has sponsored the CentOS project since 2014.

> Fedora: Fedora is a linux distribution developed by the Fedora Project sponsored mainly by Red Hat with support from other companies.There are different Fedora editions available: Workstation,Server,CoreOS and IoT.Fedora Linux was launched in 2003.

Open Source VS Closed Source

- Open source: Open source is software is distributed under a licensing agreement which allows computer code to be shared,viewed and modified by other users and organizations.
- Closed Source: Closed source software is software the source code is not free available.Closed source software refers to the computer software which source code is closes means public is not given access the source code.

Advantage of Open Source:

- **Free to use**
- **No authorized license required**
- **Developed by individual,group or organization**
- **Can be UI and API-focused**

Advantage of Closed Source:

- **Users Friendly**
- **Less risk of hacking**
- **Technical support**
- **No compliance issue**
- **Receive Information instantly**

The Free software movement:

Free software movement is a social movement with the goal of presence given freedoms for software users,namely the freedom to run the software.Free software puts its users in control of their own computing. Nowadays the free software movement goes far beyond developing the GNU system.There are the 4 freedoms of free movement which is inspect,use,modify and sell.

Sources;

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