

OVERVIEW OF LINUX DISTRIBUTORS

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Abstract: Distributions or “distros” can differ on different operating systems. Versions built on top of the underlying Linux Kernel to support a variety of use-cases and preferences. All distributions are built on Linux and most are similar.

for example, Ubuntu, Debian, Fedora, Red Hat Enterprise Linux, open SUSE / SUSE Linux Enterprise, Mageia / Mandriva, Arch Linux, Slackware Linux, Puppy Linux.

Keywords: Linux, Operating system, Distributions, Software, Kernel, Process.

I. INTRODUCTION

Linux usually operating system by downloading Linux distributions. Available of systems from embedded devices and computers to powerful supercomputers.

A Linux distribution is an operating system made from a many software, Based upon the Linux kernel and, a package management system. Linux users usually use their operating system by downloading any of the Linux distributions, they are available for a wide variety of systems from embedded devices.

A Linux distribution comprises a Linux kernel. A window manager, and a desktop environment. Most of the software is free and open-source software available as compiled binaries and in source code. Allowing modifications to the original software. Linux distributions include some software that not available in source code form. A Linux distribution also be an application and utility software. Packaged with the Linux kernel in such a way that it meets many users. The software is usually the distribution and packaged into software packages. The software packages are available online in so it called repositories. Storage locations usually distributed around the world. Six hundred Linux distributions exist, close to five hundred out of those in active development.

HISTORY OF LINUX

1. UNIX originated as a research project at AT&T Bell Labs in 1969 by Ken Thompson and Dennis Ritchie.

2. In 1991, a student at the University of Helsinki created a UNIX-like system to run on the Intel 386 processor. Intel had already started the PC market. UNIX was absent from the initial processor Intel market.

3. The first multi user and multitasking Operating System in the world.

4. Developed in several different versions for various hardware platforms in Linux.

II. MOST POPULAR LINUX DISTRIBUTIONS

1. Ubuntu:-

Ubuntu is probably the most well-known Linux distribution. Ubuntu is based on Debian, but it has software repositories. The software in these repositories is from Debian's repositories.

The Ubuntu project has a providing a solid desktop and server experience, and it isn't building its own custom technology. Ubuntu used to use the GNOME 2 desktop, but it now uses its own desktop environment. Ubuntu is building its Mir graphical server; other distributions are working on the Wayland.

Ubuntu is modern without being too bleeding edge. It offers every six months, with a more LTS (long term support) every two years. Ubuntu is run on smartphones and tablets.

Mint is a Linux distribution on top of Ubuntu. It uses Ubuntu's software Folders, so the packages are available on both. Mint was a distribution mainly because it included media codecs and software that Ubuntu didn't include by default.

This distribution has its own identity. It can't find Ubuntu's own Unity desktop here, it get a traditional Cinnamon or MATE desktop. Mint takes a more relaxed to software updates and won't automatically install software updates.

2. Debian:-

Debian is an operating system for free, open-source software. The Debian has been operating since 1993 over 20 years ago. This respected project is still releasing new versions of Debian, but it's known for much slowly than distributions like Ubuntu or Linux Mint. This make stable and conservative, Ideal for some systems.

Ubuntu was founded to take the stable Debian and improve on them quickly, the software together a user-friendly system that's more updated.

3. Fedora Linux:-

Fedora Linux is an operating system develops under Fedora project against presented by Red hat. This is a robust and matured operating system. This operating system has several default applications. New versions are released with

added features. New release of these distributions comes with different desktop state of affairs namely GNOME, KDE, and LXDE and so on. Support for audio, video and other multimedia files are also available with these distributions. Support for web cams and wireless networking is also available in new interpretation.

4. Red Hat Enterprise Linux:-

Red Hat Enterprise Linux is a Linux distribution for servers and workstations. It's based on open-source Fedora project, but is designed to platform with long-term support. Red Hat uses law to prevent Red Hat Enterprise Linux software from redistributed. However, the software is free and open-source. CentOS is a project that takes the Red Hat Enterprise Linux code, removes Red Hat's trademarks, and makes available for free and distribution. It's a free version of RHEL, makes available for free and distribution. It's a free version of RHEL.

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5. Open SUSE / SUSE Linux Enterprise:-

Open SUSE is a created Linux distribution sponsored by Novell. Novell purchased SUSE Linux in 2003, and they create an enterprise Linux project known as SUSE Linux Enterprise. Red Hat has the Fedora project feeds into Red Hat Enterprise Linux. Free versions of these distributions are known as Open SUSE Linux. Different desktop environments can be designated at the time of installation. The open SUSI wiki is the source of information of the open SUSE project and distribution. Like Fedora, open SUSE is a more version of Linux. SUSE was one of the great desktop Linux distributions.

6. Mageia / Mandriva:-

This distribution was also known as Mandrake Linux. This is also based on Red hat. It is tone of the most common and popular link's Linux distributions. MANDRIVA Linux comes from 100% community Driven organization that believes in the values of free software & cooperation and whose origination values are Development, Equality, Co-operation, Openness, International Journal of Trend in Research and Development. Fedora and open SUSE, this is a project to create an open-source Linux distribution. Mandriva SA no longer creates a Linux distribution for desktop PCs. But their business Linux server projects are based on Mageia code like how Fedora and openSUSE provide code to their enterprise equivalents.

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7. Arch Linux:-

Arch Linux is other Linux distributions. It's designed to be flexible, lightweight, minimal, and it Simple. Simple doesn't mean Arch provides graphical utilities and automatic configuration. In charge of configuring system properly and installing the software. Arch doesn't provide an graphical interface for its package manager or complex graphical configuration tools. It provides configuration files designed for easy editing. The installation disc dumps at a terminal, where need to enter the commands to configure your system, partition your disks, and install the operating system yourself.

Arch uses a "rolling release" model. It means any installation is just a snapshot of the current software. Every bit of software will be updated over time without needing to upgrade a new release of Arch. This distribution has in common with Gentoo. Linux distributions are designed for users know how their systems work. Arch uses binary packages. Gentoo had an focus on compiling every bit of software from source. It's quick to install software on Arch.

8. Slackware Linux:-

Slackware is another institution. Founded in 1993, Slackware is the Linux distribution that's still maintained. It shows like Arch, Slackware dispenses with all those graphical tools and automatic configuration scripts. There's no graphical installation procedure you'll have to partition your disk manually and then run the program. Slackware boots to a command-line environment by default

9. Puppy Linux:-

Puppy Linux is another Linux distribution. Versions have been built on Ubuntu. The latest is built on Slackware. Puppy is too small, lightweight operating system that can run in each computer. The puppy ISO file is 161 MB, and Puppy can restart from that disc in a live environment. Puppy can run on PCs with 256 MB of RAM, although it does recommend 512 MB for the best experience. Puppy is not the most modern and doesn't have all the flashiest bells and whistles, but it can help you revive an old PC.

10. Knoppix Linux:-

Knoppix Linux is one of the first distributions that came with CD distributions. CD can boot itself and operate through RAM. This is one of the most popular Linux distributions. This is a deb-based operating system. It can be uploading via Bit Torrent or FTP/HTTP or it can be sequential on CD, DVD or USB flash key. For computers which cannot boot from USB drives. There is also a "boot-only" CD edition.

III. POPULAR LINUX DISTRIBUTION BASED ON FAMILY

Some Debian operating system Kali Linux made to be a completely customizable OS, used for penetration testing. It is based on Debian GNU/Linux.

- Nepa Linux A Debian and Morphix Linux based distribution focused for desktop usage in Nepali language computing.
- Steam OS Debian based and gaming focused distribution developed by Valve Corporation and designed around the digital distribution platform.
- Ubuntu is a project that is an official derivative of the Ubuntu operating system that is "lighter, less resource hungry and more energy-efficient", using the LXDE desktop environment.
- An official derivative of Ubuntu using MATE. Desktop environment now defunct GNOME 2 code base, with an emphasis on the desktop metaphor.
- A complete Linux based operating system for primary and secondary education. It is freely available with community-based support. The Edubuntu community is built on the enshrined in the Edubuntu Manifesto: Software, Education.
- Specifically, for the Eee PC of netbooks, based on Debian. Previously named Eeebuntu and based on Ubuntu.
- Linux Mint its release-cycle with Ubuntu's long-term support, and is tailored to user-friendliness for desktop users. Also features a Debian-based edition.
- Academic and scientific use on Ubuntu. e.g. GIS maps, numerical modeling, 2D/3D/4D visualization, statistics, tools for creating simple and complex graphics, programming languages. Some Packman Based Operating System

- An i686- and x86-64-optimized distribution targeted at experienced users. Arch runs on a release system and uses the pacman utility for package management.

- It derived from Arch Linux, with the latest KDE desktop. Now uses the pacman utility for package management. Strives to be Qt-only.

- Frugalware Linux is a general-purpose Linux distribution designed for users. Some influences from Slackware, and uses a heavily modified version of the Pacman package manager, Pacman-G2, a fork of a cvs version of the complete re-write of Pacman-G1 by Aurelien Foret (the Monolithic Pacman-G1 is written by Judd Vinet).

IV. Some RPM Based Operating System

- Community-supported Linux distribution sponsored by Red Hat. It usually features cutting-edge Linux technologies.
- OpenSUSE previously branded Novell Linux Desktop. A desktop-oriented Linux distribution supplied by SUSE and targeted at the enterprise market.
- Hanthana is designed to cater the needs of Sri Lankan computer users who are unable to access Internet frequently, with many most-wanted applications built in.

V. ADVANTAGES OF LINUX

Advantages of Linux

1. Cost:

The most manifest benefit of using Linux is the fact that it is free to obtain where Microsoft products are available for a powerful and sometimes continual fee. Microsoft licenses are only allowed to be installed on a single computer. Linux distribution can be installed on any number of computers without paying a single money.

2. Security:

The security of Linux is much stronger than that of Windows. The Linux operating system has been managed to stay secure in the real of widespread viruses, spy ware and ad ware. The simplest benefits of Open source code to establish are increased security, responsibility and functionality. Because users of Open source are promptly able to identify and correct problems with the program and to refer their own improvement for incorporation into the program.

3. Reliability:

The subject field of Linux is superior to Windows because critical operating system functions are enforced in such a way that batty programs cant cause the computer to become unstable and crash.

4. Capabilities:

In component to the system helpful its tools from the UNIX world, Linux usually comes with the Apache web server, an email server, router/firewall ability and SQL information. Linux is applications developed for Linux can be operated on other UNIX.

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