

Flavors of Linux

- ➔ Linux is not a complete operating system
- ➔ It is just a kernel
- ➔ 3 major components of Linux operating System
 - i. Kernel
 - ii. Shell
 - iii. File structure
- ➔ Linux distribution take the linux kernel combined with free software to create complete packages
- ➔ To install Linux, a Linux distribution should be chosen
- ➔ Flavors of Linux come from different companies
- ➔ Flavors of Linux are called as **Distributions**
- ➔ Different flavors of Linux are
 - i. Debian
 - ii. Ubuntu
 - iii. Fedora
 - iv. CentOS/Red Hat Enterprise Linux

1. Debian

- ➔ It is also called as Debian GNU/Linux
- ➔ Debian is an unix-like operating system composed only of free open source software.
- ➔ Ubuntu was founded to take the core bits of stable Debian
- ➔ Most of famous distribution are based on Debian:
 - i. Ubuntu
 - ii. Distro Knoppix
 - iii. Damn small Linux

- ➔ Debian stable Linux distribution is popular for personal computer and network servers
- ➔ Debian was first announced in 1993 by Ian Murdock
- ➔ In Debian, package management operations are done by different tools available on Debian
- ➔ Three branches of Debian releases/ distribution
 - i. Stable
 - ii. Testing
 - iii. Unstable

i. Stable :

- It is the current release and targets stable and well tested software needs
- Bugs are fixed or removed and formed as stable

ii. Testing

- Preview branch which had some testing
- It contains newer packages than stable
- Updates continually until it is frozen

iii. Unstable

- In this, packages are accepted without checking the distribution as a whole.

2. Fedora

- ➔ Fedora is a Linux distribution developed by the community-supported Fedora Project and sponsored by Red Hat.
- ➔ It is the foundation for the commercial Red Hat Enterprise Linux
- ➔ It uses the “upstream” software that provide a platform that integrates all the upstream software without adding their own custom tools
- ➔ Fedora was founded when Red Hat decided to discontinue Red Hat Linux and form Red Hat Enterprise Linux
- ➔ Fedora provides users with an easy-to-use build system for creating their own repositories.
- ➔ Three Primary Editions:
 - i. Fedora Workstation
 - ii. Fedora Server
 - iii. Fedora Cloud
- ➔ Fedora Workstation: It targets users who need reliable, user-friendly and powerful operating system for laptop or desktop.
- ➔ Fedora Server: It targets the server with largest data center technology
- ➔ Fedora Cloud: Provides minimal image of Fedora and it is deployed in cloud computing

3. RPM

- ➔ RPM stands for Red Hat Package Manager
- ➔ The software is packages in a special archive which is called as Red Hat Package Manager
- ➔ RPM archive contains following files:
 - i. Program files
 - ii. Configuration files
 - iii. Data files
 - iv. Documentation of software application

- ➔ Users can create their own RPM packages to install or uninstall.
- ➔ It provides an easy to use interface
- ➔ RPM include
 - i. Detailed information on a package
 - ii. It contains complete testing of files it installs
- ➔ Installation can be made easy by using configure script
- ➔ This script automatically detects system configuration and generates a Makefile with which a binary is created to make it compatible to the system.
- ➔ Linux distributions such as Red Hat, OpenLinux, SUSE use RPM packages to install or remove.
- ➔ A Linux Software application consist of several files which is placed in different directories
- ➔ rpm command on a shell command line help to install or uninstall RPM packages.
- ➔ Popular RPM packages are Kpackage, GNOMERPM etc

4. UBUNTU

- ➔ Ubuntu is the Debian based free and Open source Linux Operating system
- ➔ Its distributions are used for personal computers and network servers
- ➔ Ubuntu builds a unique user interface and offers a solid choice of tools
- ➔ The latest version of Ubuntu is Ubuntu 18.04 LTS “Bionic Beaver” which was released on April 26, 2018.

➔ It releases new stable versions of Ubuntu every six months and new Long Term support versions every two years

➔ Features :

- i. Complete
- ii. Open Source
- iii. Secure
- iv. Accessible to everyone
- v. Customisable, Built in firewall and virus protection

➔ Ubuntu was founded from the core bits of Debian

➔ Flavors of Ubuntu:[

- i. Kubuntu
- ii. Xubuntu
- iii. Lubuntu
- iv. Ubuntu GNOME
- v. Ubuntu MATE
- vi. Ubuntustudio
- vii. Edubuntu
- viii. Ubuntu Kylin

➔ The different between each Ubuntu flavour are in the set of packages installed.

➔ Ubuntu OS and Ubuntu for Android can be used on mobile devices

➔ It provides a world class platform for anyone to use
