## Debian 9 Operating System

## Indroduction

Debian is a Unix-like operating system consisting of free software with the first version released in 1993. Debian 9 was released in June 2017.

## Advantages with respect to Usability

- It is flexible and customisable in 2 ways.
  - 1. The installer lets you choose to have a minimal system with only the command-line, or one with a desktop environment, with or without several other utilities like printing abilities.
  - 2. How bleeding-edge vs stable the software you use will likely be, and also in the sense you can choose from several different options in the installer
    - (a) Oldstable, the previous stable release of Debian. This is presently Debian 8 or Jessie.
    - (b) Stable, the current Debian 9 Stretch.
    - (c) Unstable (sid), this branch can be thought of as akin to a bleeding-edge rolling release model distribution as it contains the very latest packages the Debian developers have packaged.
    - (d) Testing, this branch contains newer packages, that started out in the unstable branch, but have been adequately tested to be deemed stable enough to land in this branch.
- Itâs strict on open-source, by default. It comes with no proprietary software pre installed, and the repositories enabled by default contain no proprietary software. It has the largest open source community project in history behind it, the Debian Project, with almost a thousand volunteers.

• Extremely stable system with very less hanging/freezing up of the system. Logging in and out, swapping desktop environments all can be done smoother than its contemporaries.

## Disdvantages with respect to Usability

- 1. The OS is strict on open-source. That means that if you have devices that need proprietary drivers, such as Wi-fi and video cards, youâll need to connect to the net, add the non-free repository, and install the required packages from it. By default, the users are left with no wireless connection.
- 2. Its package manager, APT, can be confusing to some in its syntax. There are many commands belonging to it like apt-cache, apt-get, add-apt-repository, etc which will be very hard for an average end user to use.
- 3. That Debian packaging is more complicated than other distributions as with most package managers you merely write one file to specify the packageâs details (excluding source files like patches), including how it is to be built, while with Debian you have to write a whole directory worth of files.
- 4. Despite Debian OS containing the option to branch out to stable (current), testing (next version) and bleeding edge (packages run by developers who participate in a project), overall it has some really outdated software and even the more bleeding-edge of the unstable branchâs software tends to be less bleeding-edge than that of Arch Linux, among other distributions.