Tecno-Tips
Open-Source Software: Free Distribution Software
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An important part of the investment in any personal computer, laptop, or tablet is the operating system that allows the device to work. On top of that, if we need to perform specific tasks we are required to purchase software applications for that purpose. Any upgrade of the operating system or the specific applications you are using comes with a price tag. A contemporary trend we are seeing is to have software as a service where you pay an annual fee or subscription to have access to the program. If you do not pay, you do not play. This situation has financially impacted organizations, businesses, and people. In general, everyone feels the pressure to upgrade computers and programs in order to keep up with the advancement of the technology, as well as to make use of new products and developments in the cyberspace. However, there are some people who keep using old or obsolete equipment and programs that are slow; in many cases, these do not allow them to communicate with or have access to Internet and electronic mail.

To make this situation worse, the security and stability of these operating systems and programs are not what the users expect for the price they are paying. On the security side, hackers and spammers are constantly targeting computers. One of the reasons for this is the concept and design of personal computers; they were originally designed to be easy-to-use for a single user. At the time, there was no way of knowing about network connectivity, so there were no security features built in for it.

From the stability side, computer programs are proprietary products designed by a group or company, and they do not have the possibility of 100% validating the product before releasing it. Once the product is on the market and being used, problems start to show up. This results in permanent releases of changes to the program (patches) that need to be incorporated. If you are not notified or aware of these situations and do not have the necessary updates, you will experience problems. Sometimes, the situation is so critical that a newer version is created, which of course usually comes with a new price tag or fee. In the end, you find that the computers and programs are not as user-friendly as advertised and that you need to invest time in the learning process (learning curve) to keep up-to-date with your knowledge on using your computer.

At this point, anyone following along should be clear that I am referring to the most popular operating systems and programs on the market: Windows and Mac (Apple). However, there is an alternative if you want to invest some time in learning a new operating system, or at least save some money while keeping current with the latest technology.

There are “open-source” programs, or programs whose source code is available for modifications and enhancements by anyone, generally a community of users. The open-source communities create, monitor, and modify the programs and share them with the rest of the world. The software produced by the open-source community is for free distribution and use. If you modify or improve a program or some part of it, the only condition is to report this change. Security and stability are two important characteristics of the open-source programs, due to the fact that the global

community of open-source is always monitoring and improving the programs. Your responsibility as user is to look for updates.

Nowadays, you can also find equivalent and sometimes compatible computer programs with the ones you are using under Windows and Mac (Apple) environments. The only difference is that they are free!

There are thousands of open-source programs. However, in this article, I will only refer to two programs that could be of interest to the readers. One is an operating system and the other is a production software for office activities. Additionally, I will provide some information about how to acquire them. There is also a large and very friendly open-source community to support you through forums and Q&A postings.

Linux Operating System. If you have a computer using Windows or an Apple operating system (Mac OS), you know that the operating system is the program that controls the operations and facilitates the interaction and communications among programs and peripheral devices. Through the years you may have experienced the pain and the cost of changing computers or upgrading operating systems so that you can keep up with the technology market.

In open-source, there is an equivalent operating system that facilitates all processes. This operating system is called "Linux," in honor of Linus Torvalds, the creator of the nucleus of the program. The Linux operating system has different "flavors" or versions based on specific characteristics and intended application of the design. Some of the more commonly used versions of operating systems are Red Hat, Ubuntu, Debian, and Fedora. You may download these programs both for desktop or server use. Under a Windows environment, you may install both systems (Windows and Linux) and instruct the computer which one you want to use during the boot-up process. If you do not want to go through the process of downloading the program and installing it, you have the alternative to purchase the commercial version ready for installation. Another alternative if you plan to change your computer is to buy a new one with Linux already installed.

I should caution that when you install Linux, it is likely your screen will start in the "prompt command" mode. This is reminiscent of the old DOS (disk operating system) screen where you would have a blank screen with a blinking cursor where you would input commands manually. However, in Linux, there is a command that will put you into the "graphic environment," and your screen should change into the familiar desktop format that is similar to Windows and Mac (Apple).

During the installation process, the system will automatically detect the configuration and any peripheral devices connected to your computer, which will lead to the automatic installation of the required drivers. In a few rare cases, you may need to look for and download drivers on your own. Once the system is set and running, you can download all the programs you need for browsing the internet, sending messages, playing music and games, or for office production work.

Libre Office Suite. The beauty of open-source programs is that many of them not only work under the Linux environment, but also for Windows and Mac (Apple) environments, and are available for free. One of the most remarkable of these programs is the "Libre Office Suite" (current version 5.1.0 for Windows and Mac OSX for Apple). Libre Office is the equivalent of the Microsoft Office

package in its latest version, and it has all of the traditional software for word processors, spread sheets, graphic presentations, databases, and drawing, as well as some others that make this a powerful office production package. The files are also designed to be compatible with Microsoft Office files. You can download the Libre Office Suite from https://www.libreoffice.org/download/libreoffice-fresh/. The installation is very user-friendly.

If you have an old or limited Microsoft Office package and do not want to buy a new one or subscribe to the new Microsoft Office 365 cloud-based service (which requires an annual fee), I recommend you download and install Libre Office.