Free Software

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May 4, 2011

Abstract

When we talk of free software, we are talking about freedom- not price. English language has limitations in expressing this. In Hindi, we can say "Muft nahin, Mukt".

Free as in freedom

The term "free software" is sometimes misunderstood–it has nothing to do with price. It is about freedom. Here, therefore, is the definition of free software: a program is free software, for you, a particular user, if:

1. You have the freedom to run the program, for any purpose.

2. You have the freedom to modify the program to suit your needs. (To make this freedom effective in practice, you must have access to the source code, since making changes in a program without having the source code is exceedingly difficult.)

3. You have the freedom to redistribute copies, either gratis or for a fee.

4. You have the freedom to distribute modified versions of the program, so that the community can benefit from your improvements.

Since "free" refers to freedom, not to price, there is no contradiction between selling copies and free software. In fact, the freedom to sell copies is crucial: collections of free software sold on CD-ROMs are important for the community, and selling them is an important way to raise funds for free software development. Therefore, a program which can't be included on these collections is not free software.

The principle of collective intelligence

Free software licence (GNU-GPL) makes it imperative to open the source code of your application software. This fullfills the condition to offer the second freedom. You will find tons of source codes on internet under the GNU licence.

You can hack it and use it for your own purpose and then release it under GNU again. This way a programmer doesn't have to re-invent the wheel! The great effect of this process is that, a goal is achieved by a team of enthusiasts (called as "geeks" in the software world) who interact with each other on internet. A private company however rich, can never match the speed and effect of the "geeks" because the number of "geeks" is exceedingly large. They form a forum on internet and work to achieve the goal.

What is the motivation for the geeks who produce free software, where the monitory gains are not so great? The real motivation is "creation". Most of the geeks are well trained in their respective fields, and are working with some company. Most of them don't like their day-to-day work, because it doesn't pose a challenge to their intelligence. As they are assured that their salary provides for daily bread and butter, the geeks want to do some interesting work in their free time and they get due credit for it.

Some free software

Linux is the most popular and known free sotware today. However it is not the only one. FreeDos is another example which is a free (and better) clone of a once-popular operating system– msdos. FreeBSD, GNU-hurd are some other examples. The web browser Mozilla Firefox is another example of a popular and free sotware. Open Office is also used very widely.

Apart from the commonly used applications mentioned above, some special applications are also implemented as free softwares. These prove to be highly cost effective solutions for many institutions and individuals. A "Matlab" costs about Rs. 4 to 5 lakh because it is a proprietary software. "Scilab" is the matlab-clone and costs you nothing. The QCAD can be a good alternative for "Autocad". Another free software "GIMP" is almost superior to its proprietary counterparts- CorelDraw and PhotoShop. GNUCash is a wonderful software for accountants. GEDA can replace Orcad if you work in electronics. Highly enjoyable games are also implemented by Free Software People.

Why free software?

- Linux, FreeBSD are compatible to UNIX. It is very difficult to activate a virus on these systems. You can almost say "Linux is virus free".

- Various forums support free softwares at no cost. Linux User Groups are such examples. In Pune, Pune Linux User's Group (www.plug.org.in) is active in supporting linux users. It is normally observed that such forums are not only active but respond very quickly. Most of the times your problem is solved in less than 24 hours. Commercial software makers are extremely sluggish in this respect once they sell their product to you.

- You can even earn on free sotware. You can distribute the free software for a fee and then give support to your clients.

- Free software provides you the opportunity to "peep into" the source code and teaches you how a good code should be written.

- Free software provides you the choice to select the sotware that suits your purpose, your machine configuration and your pocket. I still use my old 486 machines (8Mb ram and 480Mb hard disk) with FreeDos on it. I develop microcontroller applications, play many games and can even browse on the web if needed. Because of free software, your machine never becomes obsolete.

- Free software users form a community. The "not only money-" and "let-us-share a good software" attitudes become important. Helping each other to progress becomes the new motto.

Free Software Users

Google uses Linux on their 10,000 machines and serves the world with very high reliablity and rock solid stability . In India, Department of Justice uses Linux on many of their machines. Life Insurance Corporation of India uses linux for their customer support and internal operation. IDBI bank uses Linux. Breach Candy Hospital uses linux. British Library, Pune uses "Koha"- a free software for big libraries. And last but not the least, we at TMI use Linux on many machines.

How to be a part of free software movement?

- Install and use free operating system on your machine.

- Use only free softwares and say no to the proprietory ones.

- "Hack" the source codes and improve the existing softwares.

- Release your own work under the GNU GP licence. (See www.gnu.org)

- If you are not a software developer, be a tester. Send bug reports to the original developers.

- Participate actively in Free Software forums.

- Remember "Muft nahin- Mukt".