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Philosophy of Free

Patrick TenHoopen



Definition of Free Software

- According to the GNU Project and the Free Software Foundation, free software is not about price but about freedom and liberty, both for the user and the community.
- Think of it as free as in free speech, not free beer.
- When talking about free software, avoid terms such as "give away" or "for free" to prevent the implication of price as the issue and not freedom.
- Users should have the freedom to run, copy, distribute, study, change and improve the software.
- This allows the user full control of the software.



The Four Freedoms

(0) The freedom to run the program as you wish, for any purpose.

(1) The freedom to study how the program works, and change it so it does your computing as you wish. Access to the source code is a precondition for this.

(2) The freedom to redistribute copies so you can help your neighbor.

(3) The freedom to distribute copies of your modified versions to others. By doing this you can give the whole community a chance to benefit from your changes. Access to the source code is a precondition for this.



The Four Freedoms, Cont.

- The freedoms promote sharing and cooperation which are essential for society as well as teaching people to value freedom.
- If the user doesn't have full control of the software, it is considered non-free and proprietary. This unjustly allows the developer to control the user.



Open Source

- The term "open source", while concerning the same category of software, is not the same thing as "free software".
- It was originally proposed to avoid a possible misunderstanding with the term "free software", but it uses a different philosophy that doesn't refer to freedom.
- It avoids the right v. wrong ethical issue but promotes the practical benefits of reliable software.
- Open source is a development methodology while free software is a social movement.



GNU

- GNU stands for “GNU's Not Unix”.
- Completely free software operating system, upward-compatible with Unix.
- Richard Stallman announced it in September 1983.
- The project to develop the GNU system is called the “GNU Project”.
- Wanted to bring back the cooperative spirit that prevailed in the computing community in the earlier days.
- Development work started in January 1984.
- By 1990, all the major components except one, the kernel, were completed.
- In 1991, Linux, a Unix-like kernel, was developed by Linus Torvalds and made free software in 1992. Combining Linux with the almost-complete GNU system resulted in a complete operating system: the GNU/Linux system.



Some GNU Programs

- GNOME graphical desktop
- GNU C compiler
- GNU tar
- Bourne Again SHell (BASH)
- PostScript interpreter Ghostscript
- GNU C Library (glibc)



GNU/Linux

- Linux is a kernel; an essential part of an operating system.
- The whole system is basically GNU with Linux added, or GNU/Linux.
- All the “Linux” distributions are really distributions of GNU/Linux.



Free Software Foundation

- The Free Software Foundation is a nonprofit organization that was founded in October 1985 by Richard Stallman, initially to raise funds to help develop GNU.
- It also advocates free software ideals.
- It's worldwide mission is to promote computer user freedom.

