The four freedoms of a software user

An interview with Richard Stallman,
the founder of the GNU Project and the Free Software Foundation

LOG IN: The story of free software sounds like a fairy tale, like the democratic dream come true: individual citizens get together and work on an alternative to the software of big companies. This alternative is so successful that by now many of the big companies have changed over to use free software. Did you intend or foresee that development when you began with the GNU project?

Stallman: If this were a fairy tale, free software would inevitably be headed for complete triumph. In reality, victory is never guaranteed. We are campaigning for freedom, and facing powerful opponents.

   The free software movement campaigns for four essential freedoms that every user of software ought to have:
0. Freedom to run the program as you wish.
1. Freedom to study the source code, and change it, so that the program does what you wish.
2. Freedom to distribute copies of the program to others, when you wish.
3. Freedom to distribute copies of your modified versions, when you wish.

   How far have we succeeded? Around a hundred million users of free operating systems have these freedoms, more or less. But many of them use some non-free applications, drivers, or programming platforms, which means they are still partly chained. And most computer users still use proprietary (non-free) operating systems such as Windows and Mac OS, which increasingly are designed for the specific purpose of restricting and controlling their own users. (This kind of malicious feature is called Digital Restrictions Management (see http://DefectiveByDesign.org/ and http://BadVista.fsf.org/.)

   We have a long way to go to achieve our goal: the liberation of cyberspace and all its inhabitants.

LOG IN: You explicitly didn't want to be introduced in this interview linked with the topic "open source software". Why is this difference so important for you?

Stallman: In the 90s, as the GNU+Linux operating system gained popularity, a fundamental philosophical split developed in the user community, between those who supported the free software movement and its values of freedom and social solidarity, and those who made convenience their primary value.

   In 1998, some of the latter group coined the term "open source" as a way of talking about free software without raising the ethical and social issues. Some who did care about freedom joined that campaign, seeing it as a tactic to win support from businesses that are uncomfortable with talking about right and wrong. The term "open source" has come to stand for an approach which avoids presenting the issue in ethical terms. (Contrast the open source site, http://www.opensource.org/, with the free software movement's views in http://www.gnu.org/philosophy/.)

Their approach succeeded in winning useful support from business, but at a deeper level it has weakened our community: concern for freedom and social solidarity has become a minority view among the users of free software. This weakens our community when it confronts the businesses that refuse to cooperate, such as the hardware companies that won't tell us the specs for their products.

We free software activists continue trying to bring these issues to users' attention, but in addition to the disadvantage of being a minority, we face the additional handicap that the mainstream media typically mislabel us as supporters of "open source". (Imagine what a handicap it would be to the Green Party if articles about its leaders always labeled them as "Christian Democrat".)

Dozens if not hundreds of articles have erroneously labeled me as the "father of open source", and lead readers to believe that I agree with the "open source" views that they present. This is why I now insist that journalists agree to avoid this error before I grant an interview. Publicity for me is not useful if it doesn't spread awareness of the free software movement.

LOG IN: Many of our readers are teachers or work in the field of career oriented training. What do you think should these people know about free software and what should they teach their students about it?

Stallman: Schools have a social mission: to build a society of freedom and cooperation. To carry out that mission means teaching free software and only free software. There are several reasons for this. Starting with most superficial, they are:

0. To save money, which schools don't have enough of.
1. To teach students how to manage free software – to function as citizens of a society in which computer users have freedom.
2. To give their students who are natural-born programmers, the youths of 13 or 14 who are fascinated by programming, the chance to learn to write good clear code. (You learn this by reading lots of code and changing lots of code – something that only free software allows.)
3. To teach children, starting in kindergarten, the habit and spirit of helping their neighbors. Every class should have this rule: Children, if you bring software to school, you may not keep it for yourself alone; you must share it with the rest of the class. For honesty's sake, the school must follow its own rule: it must bring only free software to class.

Now that free operating systems have convenient graphical interfaces, the main remaining advantage of non-free operating systems such as Windows comes from various forms of social inertia. Windows has more users; it gets better support from some hardware companies; it comes with most computers; and it gets support from many schools and governments.

Schools must not allow social inertia to decide whether they will teach freedom or teach subservience.

LOG IN: Many people use software under Windows from unauthorized copies, especially young people using games. They don't want to use free games but are keen on special Windows software. What would you tell them?

Stallman: Using an unauthorized copy of a non-free program is not a good thing. It is almost as bad as using an authorized copy. Every non-free program is an attack on your freedom

(indeed, the failure to respect essential freedoms is what makes the program non-free). If they say you are forbidden to share it, then it is an attack on social solidarity too.

In most cases, the only difference between an authorized copy and an unauthorized copy is that the former directly rewards the perpetrator of this attack, while the latter does not. This makes the unauthorized copy a slightly lesser evil, but it remains evil. The only way to keep your freedom is to reject non-free software, whether authorized or not. As you think about the issue of freedom, you will find that easier to do.

LOG IN: Many people, when using their cars, depend on the hardware producers' business secrets, in an increasing way on those from software, controlling their cars and being considered a business secret with secret program sources as well. They don't think that to be a problem. Why should they have a problem with proprietary software on their computer, especially when they aren't able to understand or even change that software, even if they had access to the program sources?

Stallman: Actually, many car owners do consider this a problem, because it limits their options for servicing their cars, and for modifying them. Legislation has actually been proposed in the US to address some of these problems.

The four freedoms that define free software are essential for all computer users. Every user can directly exercise freedom 0 (to run the program) and freedom 2 (to redistribute copies), since these do not require programming skill. Freedoms 1 (to change the program) and 3 (to publish the changed version) entail programming, and therefore each person can only exercise them to the extent he is capable of programming. But when programmers do this, and publish a modified version, every user can choose to use it or not. This means you can decide what your software will do.

If you want to go further, you can persuade or pay a programmer to make whatever changes you want. The result is that all users have control over their own computation, to whatever extent they wish to exercise it.

It is quite true that many users do not appreciate the importance of this freedom. When they started using computers, they used proprietary software, as did everyone around them. So they take for granted that software will be proprietary, and that users will be under the control of the developers. Public debate on the issue has been dominated by the proprietary software companies and those tied to them by business interests. Users can go for years before they ever hear that the Free Software Movement says they ought to have freedom. And when they do hear it, it may seem so shocking that they cannot take it seriously.

The same situation applied, centuries ago, to all of the human rights we now recognize. Hundreds of years ago, the suggestion that everyone should have the right to express any opinion must have seemed shocking to most people who heard it. Like good subjects of King George Bush today, they took for granted that their rulers had power, and did not imagine the idea that such power could be unjust or should be limited. However, when ideas of human rights and equality began to circulate, those who were denied freedom began to recognize the injustice in the social arrangements they had been accustomed to.

The Free Software Movement's most important task is to make all computer users familiar with the idea that they deserve freedom. The reason I so persistently reject the description of my work as "open source" is because that label obscures this central point.

LOG IN: Many systems, now or in the near future, are controlled by software, e. g. mobile phones, cars, devices of consumer electronics or house control. Do you see the necessity and possibility to develop and use free software in these sections?

Stallman: This will become both possible and necessary, as these devices are increasingly designed for installation new software, and to communicate with networks. However, we will have to overcome the hindrance of many manufacturers – hindrance based not on ideological opposition but rather on minor advantages they gain from not cooperating.

LOG IN: Mr. Stallman, thank you very much for this interview!

This interview was conducted by Werner Arnhold, LOG IN, Berlin.