

# Open Source Software

Almost everybody heard the term 'Open Source' once in his life. People often think, this is only for hackers, geeks and nerds and wouldn't be used for serious tasks. I'm going to tell you now, why this isn't true!

Open Source Software, in short OSS, is a definition for software, whose source code is available, adjustable, distributable and can be used for any purpose. You get the software 'for free', i.e. you must not pay or get payed for it.

## History of OSS

In the 1960 almost all software was open source. At this time software was only a kind of gift added to a computer. But after 1970 the price of computer decreased dramatically and PCs became affordable. Because of the, relative to the hardware costs, rising software value many firms developed software which was protected by different restricting licenses, so-called proprietary software.

In the year 1983 the company AT&T published Unix System V which was only available as binary software. In response to this act Richard Stallman founded the GNU-project. The aim of this project was to develop a freely available open source clone of Unix System V.

The abbreviation 'GNU' is a recursive acronym and consists of the three words 'GNU's Not Unix'. For this purpose the GNU-project created the GPL, the GNU General Public License. This License guarantees the possibility to distribute and modify any source code, which is projected by the GPL. On the other hand you have the obligation to append the full source code to your programs.

## The rise of OSS

Linus Torvalds forced the development of open source significantly by publishing the Linux kernel under the GPL in 1993. A few years later IBM discovered Linux and started to work on it. They invested billions of Dollars in development so that Linux became a very flexible and fast server operation system which also runs on the big IBM mainframes.

Nowadays there are many popular Open Source programs and most of the users don't know that these applications are Open Source Software. Some examples are OpenOffice, The Gimp, Blender, Firefox and Thunderbird. These well known programs are available for Windows and Linux and maybe some other OSes like Mac OS-X and \*BSD.

## Benefits of OSS

The most significant advantage of free software is that it costs principally nothing. Many entrepreneurs will now negate and answer that system administrators are much more expensive than software licenses.

But there are also non-payable benefits depending on the availability of the source code. For example, if Microsoft would stop selling MS Office, nobody would be able to open his old Word documents. If you use OpenOffice, there are many other programs like KWord or Abiword which could open these files. In the most bad situation you would be able to write your own application because the structure of the files is viewable to anyone.

## An economic view on OSS

Open Source Software brought many new ideas to business. The companies try to work together and not against each other, with undocumented protocols and restricting patents.

Because of the free software the firms aim to sell services and maintenance contracts, others sell computer systems, ready-for-use, like mail server appliances.

Additionally, there is a pressure to improve performance and features, because otherwise the software easily gets replaced by another one, which can do the same thing better, and, due to open standards, can handle your old files and data. This forces especially companies with an absolute monopoly not just to rely on it, but to fight in a healthy market-challenge.

## The future of OSS

In my opinion free and open software will become a very important part of our personal and commercial life. Great software is no longer dedicated to rich people and companies so that everyone has the same chances. Information is also going to be free and accessible by anyone which is practised by Wikipedia and a lot of other projects. There already websites where scientists offers their research results for free.

The first steps into a new kind of information society have already been done.