

# **GNU - General Public License and its meaning for Software Business**

Hans-Holger Schmuhl,  
Tampere University of Technology

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## **1 Introduction**

Nower days the importance and influence of Open Source Software has increased a lot, more and more private and public institutions and companies rely on Software, which Source Code is available to everyone. One central question of this development is, what does that mean for Software Business, especially in legal terms and in terms concerning the revenue logic.

## **2 Free Software Foundation**

The base of Open Source was given by the Free Software Foundation (FSF), which was formed in 1983 and which main purpose was in that time to create a free version of the Unix Operating System (OS). The work of the FSF did not result in a free version of a Unix OS but in useful tools, which became very popular among Unix developers. These tools were published under the General Public License(GPL), which was revolutionary for this time. It was the total opposite of all existing licenses at this time. The main purposes of the existing licenses were and still are to protect the source code against any access and to strengthen the attempt of certain companies to get or keep a monopoly in this type of business.

As stated in the preamble of the GPL, free software does not only mean free concerning the price. It means freedom of the individuum, who wants to use, modify or distribute a program or only extracts of it.

Before we focus on the details of the GPL, we should just mention two more terms which often are used in association with GPL and Open Source.

”Copyleft” is a synonyme of GPL and derived from the word Copyright. This is because the GPL has a very different definition of Copyright combined with the classical understanding of Copyright.

Tools published by the FSF have the letters ”GNU” as prefix in its names. GNU is an acronym for ”Gnu’s Not Unix”.

### 3 General Public License

If a program is licensed under the GPL the following terms and conditions apply on it. The exact license can be found under [1]. In the following paragraph, the word program means a program which is licensed under the GPL.

- Copying, distribution and modification of the program are covered by the GPL and nothing else.
- If you distribute a program to a new licensee, you have to make the complete source code of it available for her/him, including the license terms.
- You can distribute the program for free or charge anything you want for it. But this is not so simple as it sounds. You have to take the last point of this overview into consideration. If you have obtained the program and source code for free, you have to pass these rights on to the new licensee, but you can charge him for special services. For example you can offer him a warranty protection in exchange for a fee.
- If you modify the original program, you have to comment the done change prominently and alter at least the version number.
- One of the most important parts of the GPL is the fact, that the license is distributed for free and so, there is no warranty in any way.
- The core of the GPL is, that ”it gives licensees broad rights to sell, copy and modify licensed programs, so long as licensees grant to downstream licensees the same rights to sell, copy and modify the modifications to the original program” [2].

## 4 Meaning for Software Business

Now the question is, what does the GPL and generally Open Source mean for Software Business.

First of all, if you have the complete source code of a program, it is much more easier for the developers to design and implement new programs or extentions, which interoperate with this one. Commercial software, which source code is not freely available, often comes with very rare or bad documentation of the Application Programming Interface (API) and a lack of other relevant information. The best help for the developer is the source code itself, so she/he gets to know, how the considered program will act on certain inputs. Also small bugs in the used program can cause a big effort for the developer to find a workaround. But if she/he is in the possession of the source code, he can easily correct the failure and improve in this way also the original program.

So, in regard of this aspect, you can save a lot of money in the field of software engineering at your company by relying on Open Source.

The Open Source adherers have formed a big, worldwide and very active community, whose main communication medium is the internet. They have a common source code pool and a mass of message boards, mailing lists and discussion forums where all the issues of software developement and usage can be discussed. This community has the opportunity for extensive and speedy collaboration on development projects and its members utilise that to a great extend.

Just to give an example: If somebody has discovered a security gap in the Linux Kernel (so that somebody from the outside world gets access to you personal data or is even able to destroy it), a patch is available within days. If such a fault is discovered in the OS of Microsoft, it lasts at least a few weeks, until a patch is obtainable and then you can not be sure that it will fix the fault or even open another security gap.

So, in general if you have any problems with or any questions on a certain program, you can be sure to find some help in the internet or otherwise find a place where to post your concern. And normally you can relay on the fact, that you will get an answer within 24 hours and furthermore you do not have to pay even 1 Cent for it.

Due to the GPL and the rules of Open Source[4], Open Source Software is available for everyone and generally free of any charge. So, you can save the expenses of license fees, which are especially in the field of professional software not so nonsignificant.

No questions, until you find the right program for your purpose and until you get used to the new software, you have to spend a certain amount of extra money on that activity. But in long-term view, it will be much cheaper than the usage of Closed Source/Commercial Software.

So finally one may ask "...and how can I then earn money and run a business with Open Source if everything is free?" Well, I think the answer is quite easy. There is really no big difference between the business models of Open Source and Closed Source. The only distinction is that you can not earn money by selling licenses for certain programs. You can take advantage of the following aspects, either of all together at a same extend or you can focus on one special aspect in your revenue logic.

*main ideas are taken from [3]*

**Distributions** You can offer a special selection of Open Source software, including Linux as OS for groups of particular interest/profession. E.g. a Multimedia-Workstation, a Network-Server, a Workstation for physicians to do assignments, a Workstation for statisticians to do studies or a Workstation for engineers to do complicated calculations and plannings ...

**Port - GUI** You can do a port of a certain program from one Window Manager/System to another. E.g. port a program from KDE to GNOME, so that it runs totally integrated in GNOME.

Another similar aspect is to write a Grapical User Interface (GUI) for a command-line based tool to simplify its usage.

Although you have to publish the port under the GPL, because the original program was also licensed under it, you can invoice your customer for this work, if they urgently need it.

**Administration** There are many customers who want to have e.g. a Linux-Server or Linux-Workstation, but do not have the knowledge to set it up and do all the administrative work. So you can offer them a kind of bundle/package including all the administrative tasks like configuration, backup, user-management, update of programs, maintenance ...

**Warranty** Due to the fact, that the GPL does not include any warranty, you can offer to your customers a certain warranty. You can analyse if a Open Source program works properly for the purpose of your customer and sell them a kind of guarantee for that.

**Training** When a company or private person starts to work with Linux or an Open Source program, he is not very familiar with the usage of it. So you can offer them any kind of training. E.g. how to write letters with L<sup>A</sup>T<sub>E</sub>X

**Support** This is the main field of Open Source where you can make most of the money. You can help your customers with any affair concerning Open Source. You can for

example initiate a hotline, an emergency support service, a consulting service, sell support contracts which include e.g. 1 year of support ... Here you just have the same possibilities as in the field of Closed Source software.

## 5 Conclusion

Well, the current development on the market speaks for its own. There is a prospering and fast growing branch of companies offering service, support and products directly connected with Open Source. Even many Closed Source programs, formally based on the Microsoft OS are now also available for Linux. And there is generally a raising demand for Open Source software all over the world, of which even Microsoft is now very worried about.

So in conclusion, when revising the given aspects, it is more than clear that the Open Source Business has all opportunities to run a successful business. Apart from the license fees, it is just the same as Closed Source, except that the freedom of the individual is guaranteed.

## References

- [1] GNU General Public License:  
<http://www.gnu.org/copyleft/gpl.html>
- [2] An Overview of "Open Source" Software Licenses - The American Bar Association:  
<http://www.abanet.org/intelprop/opensource.html>
- [3] Free Software Business Models - Talk by Jim Kingdon to Free Software Conference and DCLUG:  
[http://dclug.tux.org/bytes\\_1996\\_12\\_freesoftware.html](http://dclug.tux.org/bytes_1996_12_freesoftware.html)
- [4] for additional information see:  
[www.opensource.org](http://www.opensource.org)