



## Podcast series

# A Guide to Free and Open Source Software

## Episode 3: How to Choose the Right Free and Open Source Software License?

### Summary of Episode 2

Hello and welcome to the third part of the CCdigitallaw podcast about free and open source software. In the last second part you learned where you can find all the free and open source software licenses to license the email program that you wrote in the first part of this podcast.

### Introduction to Episode 3

In this third part you will learn about differences between different free and open source software licenses. So, in the end of this part you will be able to choose the one free and open source software license that best fits your needs.

### Permissive and copyleft licenses

So which one of all the free and open source software licenses should you choose for the email program that we wrote in the first part?

As a first step, you should think about whether you want to use a permissive or a copyleft free and open source software license. Permissive licenses and copyleft licenses are the two main types of free and open source software licenses. The difference between permissive licenses and copyleft licenses lies in the obligations that have to be met by people who want to distribute a modified version of your free and open source email program.

Permissive licenses allow to distribute modified versions of free and open source software in any way. So, anyone is allowed to make modifications and they are also allowed to distribute the modified version in whatever way they want.

Copyleft licenses on the other hand oblige to distribute modified versions of free and open source software as free and open source software too. So with copyleft licenses anyone is allowed to make modifications. But modifications have to be licensed under the same free and open source software license. So let's explore what happens if you license the email program that you wrote under a permissive license and what happens if you license it under a copyleft license.

You wrote free and open source email program in the first part of this podcast and your friend got a copy and modifies the source code of your email program. The modified version says in the source code that if a new email is received then show a little letter symbol and make a sound. So your part of the modified email program is "if a new email is received then show a little letter symbol". Your friend's part is "and make a sound". You remain the owner of the copyrights of the part of the modified version that you wrote, and your friend becomes owner of the copyrights of his added code. Because your email program is free and open source, your friend is allowed to make and distribute this modified email program. This is because you licensed the necessary copyrights with the attached free and open source license.

## Permissive licenses

Now your friend sells copies of the machine-readable object code of ones and zeroes and he does not make the human-readable source code of the modified email program available to everybody. Is he allowed to do that when you licensed your email program under a permissive free and open source license? The answer is yes, he is allowed to only sell copies of the machine-readable object code of the modified email program. Permissive means that distributions of modifications do not have to be licensed under a free and open source software license. This means your friend can distribute the modification in any way he likes. Your friend is allowed to only distribute the computer readable object code of ones and zeroes and keep the source code secret. Or your friend could allow others to only make copies of the modified version but not make modifications of his modified email program.

An example for a permissive free and open source software license is the Free BSD License.

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## Copyleft licenses

Now let's say you distributed your email program under a copyleft license, for example the GNU General Public License. Your friend made the modified version of your email program and now wants to distribute copies of the machine-readable object code of ones and zeros and he does not grant access to the source code. Is your friend allowed to do that? Here the answer is no. Your friend is not allowed to distribute only the object code. Copyleft licenses contain the obligation, that modified versions of free and open source software have to be free and open source software too. This means that your friend has to license his modified email program under a free and open source software license. Therefore he has to grant access to the source code of the modified email program. And he has to license his copyrights of the modified version. Remember he automatically became owner of the copyrights of his part of the modified email program that

states that the email has to make a sound when a new email is received. So he has to license his copyrights, to copy, distribute and modify the modified email program so that everybody that gets a copy of the modified email program is able and allowed to copy, distribute and make modifications.

So which type of license should you choose permissive or copyleft licenses?

If you want modifications of your email program to stay free and open source software you should choose a copyleft license. This means you will also be allowed to use and modify the modification of your email program that your friend made.

If you do not care what happens with modifications of your email program and you just want everybody to be able to use your code in any way you should choose a permissive free and open source software license.

### **Other differences in free and open source software licenses**

However, be aware that there are many other differences between different free and open source software licenses. For example, clauses concerning digital rights management also known as DRM: Digital Rights Management Technologies limit the possibility to use, modify and distribute copyright protected works, such as computer programs. According to copyright law it is prohibited to circumvent such Digital Rights Management Technologies. Therefore some free and open source software licenses explicitly prohibit to use DRM, some licenses do not mention it, and still other licenses state that it is regarded as legal to circumvent DRM technologies that are applied to the licensed Free and Open Source computer program.

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3

Another difference in free and open source software licensing is the issue of patents. In addition to copyright some computer programs are protected by patent law. As with copyrights, patent law grants exclusive rights to its owner and if you want to use patent protected computer programs you need the permission of the owner. Many free and open source software licenses do not mention what happens if a computer program is protected by patent law. Especially if patent rights are licensed as well. Other Licenses explicitly regulate the grant of patent licenses but the scope of the patent license may also vary from license to license.

I mention these differences just to make clear that it is always best to look into the license text before you choose a license for your computer program. You can usually find a lot of information about each license online.

### **Summary**

To resume, there are two main types of free and open source software licenses: permissive and copyleft licenses. Modified versions of computer programs distributed under a permissive license can be distributed and licensed in any way. Copyleft licenses state that modified versions of computer programs have to be licensed under the same or a compatible free and open source software license.

There are also other differences that have to be considered when choosing a free and open source software license. So it is best to always read the license or at least ask someone who has read it before you use a free and open source software license.

In the next fourth and last part we will answer the question: are you allowed to sell copies of your free and open source email program?

If you have any questions or feedback please write to [info@ccdigitallaw.ch](mailto:info@ccdigitallaw.ch)

## Credits

This script was written by Melanie Graf, a member of CCdigitallaw and a legal counsel at the University Library Basel. Last updated on 02.05.2018.



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