



Wigley & Company

BARRISTERS *and* SOLICITORS

OPEN SOURCE SOFTWARE

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Open source is a burning issue in the industry and has particularly difficult legal issues, which we summarise. Any business intending to use open source needs to carefully weigh up the benefits and risks, from both a legal and commercial point of view. Of key importance is choosing the right open source licence. There are many licences available, and a careful review is necessary to ensure that the legalese reflects the objectives of the business.

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1 Open Source Software

- 1.1 In recent times there has been real growth in the use of open source software (OSS) by both customers and vendors. More and more businesses are using open source products such as Linux, the Mozilla browser and Apache web server. This trend is likely to continue and it's important that both users and developers understand the benefits as well as the risks of using OSS.

2 What is Open Source Software?

- 2.1 The best way to explain OSS is to contrast it with the way that software is traditionally licensed. Typically, an end user will receive a licence that:
- 2.1.1 is non-transferable (that is, they can't let anyone else use the software);
 - 2.1.2 has limited rights to copy (usually only one copy is allowed for back up purposes); and
 - 2.1.3 only licenses software in its object code form (so that the underlying code cannot be read or changed). The rationale behind this approach is that developers tend to make their

money by keeping their source code confidential and reselling it to new clients.

2.2 Contrast this with OSS. OSS is essentially software distributed under a licence that provides much greater rights than under the traditional licence. It allows:

2.2.1 **Free redistribution.** Any user of OSS is able to freely copy and pass on the software as often as they wish. There is typically no charge in doing this (except for maybe a small charge to cover the cost of the CD etc).

2.2.2 **Modification.** Users are allowed to modify the program and create derivative works from the program.

2.2.3 **Access to the source code.** The source code for the software must be provided with the program (or at least be readily accessible). “Source code” is the human readable form of code that a developer will program in. However, for an actual computer to read that code it must be changed into a computer readable form (this is called “object code” or sometimes “binary” or “executable code”). The advantage of source code is that it can actually be read and allows changes to be made to the software. For all practical purposes, it’s impossible to do this with object code.

2.3 A further distinction is that your typical OSS product is usually the product of the work of a number of different, and unrelated, software developers – all contributing to the source code with improvements and refinements.

3 What OSS is not

3.1 OSS is not:

3.1.1 Freeware (i.e. software that is provided at no cost to the end user, but still subject to licence terms);

3.1.2 Shareware (i.e. software provided on a free trial basis);

3.1.3 Public domain (software in which the developer has waived any copyright and which can be freely used or modified).

3.2 A more complete definition for OSS can be found at http://www.opensource.org/docs/definition_plain.php. This is the accepted standard for what is, and what is not, OSS.

4 What are the benefits?

- 4.1 In general terms the main benefits are as follows:
- 4.1.1 **Access to source code.** As the source code is available you are able to “look under the hood” and see how and why the software operates in the way it does. This can stop you from having to reinvent the wheel for a client and will enable any necessary customisations to be made. Access to the source code is of substantial benefit to the end user in a situation where a software developer goes under. Without access to the source code the end user is left “high and dry” with little ability to provide ongoing support for its software (which could be mission critical).
 - 4.1.2 **Flexibility.** A key advantage of OSS is the flexibility to be able to freely enhance or customise the software to meet a particular need. Access to the source code means the end user is not dependent on the software vendor to provide customisations and updates, they can instead do the work in-house or shop around for the best deal. Further, if there is a bug in the software the end user does not need to wait until the next “release” or “bug fix” from a developer, it can access the source code and fix it itself.
 - 4.1.3 **Cost.** Typically, most open source products are free of charge. However, there will occasionally be costs related to the distribution of the product (like the price of a CD).
 - 4.1.4 **Broad rights.** As mentioned above, there are broad rights to re-distribute, copy and modify OSS (subject of course to compliance with the licence terms – which we deal with below).

5 What are the Risks

- 5.1 The benefits above need to be weighed up against some of the risks that are present with OSS. Some of these risks are:
- 5.1.1 **No warranties.** OSS licenses will specifically state the software is provided “As Is” and without any warranties at all (for example, warranties that the software will be fit for any purpose). Related to this is the fact there is no warranty period under which the supplier of the software is required to fix any defects. Further, OSS licences will also contain a wide ranging limitation of liability clause which is intended to prevent any claims being made against the developers.
 - 5.1.2 So, essentially, when using OSS the end user accepts all of the risks that the software may contain errors and will not perform in the way it is expected to. This is a substantial risk issue for those end users that wish to use software in a mission critical

environment. By providing a warranty the developer has some “skin in the game” and this provides some level of comfort to the end user.

- 5.1.3 However, that said, it is not uncommon for traditional software licences to exclude almost every warranty available. Also, if problems arise (for example, “bugs” in the software), support can sometime be more quickly obtained from the Open Source community, than from a software proprietor. However, this support is not guaranteed and so most large scale users of OSS will want secure an alternative means of support.
- 5.1.4 **Infringement of IP.** When using OSS there is no guarantee that it will not infringe the intellectual property (“IP”) rights of a third party. For example, one of the many developers of an OSS product could have incorporated proprietary code (maybe from their employer) within the OSS. This presents a litigation risk.
- 5.1.5 To address this risk the end user will typically require from the developer an indemnity to protect them from any claim that they have infringed a third party’s intellectual property rights. If this infringement occurs, the end user’s ability to recover any costs that it has incurred as a result of a claim is substantially increased.
- 5.1.6 This lack of protection from IP infringement presents a substantial hurdle for those that want to use OSS in a business context. However, the hurdle is not insurmountable – the benefits and risks can be weighed, and a commercial call made. In any event, access to the source code can mean that when a claim is made, the infringing code can promptly be removed from the product.
- 5.1.7 **Derivative works.** It is common for some open source licences to require that if the software is modified or enhanced in any way, the resulting code must also be released under the same licence (so all the source code must also be made available). This is an issue for software developers as there is a risk that their own software may become OSS through use of an OSS product (for example by including a portion of OSS in a proprietary product, by including proprietary code within modifications to OSS, or by creating software which is derived from OSS).
- 5.1.8 This is what some people refer to as the “viral” nature of OSS – i.e. proprietary software is “infected” by the terms of the open

source licence when it is used with OSS. Whether this is the case will depend on the terms of the actual licence.

- 5.1.9 The most infamous of these types of licences is the General Public Licence (“GPL”). In general terms, the GPL provides that any software that contains a component of software licensed under the GPL, and any software derived from software licensed under the GPL must also be distributed under the GPL. In each case, special care would be needed from a legal point of view to determine whether the GPL applies.
- 5.1.10 That said, there are also advantages to the GPL licence that need to be considered. For example, software released under the GPL is not easily “hijacked” by a competitor and included in a commercial product.
- 5.1.11 **Enforcement.** To our knowledge there has yet to be any major case in New Zealand, or overseas, that deals with the enforceability of open source licences. Experts have raised a number of issues with open source licences ranging from which countries law should apply, whether the terms are properly agreed to by an end user (there is no signing of the licence agreement, similar to “click-wrap” and “shrink-wrap” licenses), to whether there would be any loss to the developers that would allow them to claim damages. Until these types of issues are resolved the safe course is to assume that an open source licence is enforceable.

6 Examine the OSS Licences

- 6.1 The key to addressing the issues raised above is to carefully review the licence terms that accompany OSS. There are a multitude of OSS licences available, each with their own nuances. Generally speaking, there are three main types of open source licences to consider.
- 6.1.1 **The General Public Licence (“GPL”).** This is the “classic” open source license, and as mentioned above is somewhat controversial in the approach it takes to derivative works. A key feature of the GPL is that any modifications to GPL code cannot be released under a proprietary licence. Further, GPL code cannot be incorporated into a proprietary program without releasing the whole of the proprietary program under the GPL (this means releasing the source code of the proprietary programme). Also, these derivative works or modifications must be licensed at no charge to third parties.
- 6.1.2 **Berkeley Software Distribution Licences (“BSD Licence”).** The BSD Licence is generally considered to be the least restrictive of the open source licences as it does not require the

distribution of source code for any derivative works. In other words, software under a BSD Licence can be combined with other software, integrated with other software, and distributed in object code or source code under a proprietary licence (and for a charge).

- 6.1.3 **Mozilla Public Licence (“MPL”).** The MPL was developed in connection with Netscape’s release of its browser under open source in 1998. The advantage of the MPL is that it is relatively clear what software and code will be subject to the licence. MPL requires the source code to be released for the original “Covered Code” and modifications to it. However, this Covered Code can be included within a “Larger Work” without the source code of that Larger Work having to be disclosed. As such, the MPL is often a preferred licence for commercial developers.

7 More than one licence

- 7.1 The original owner of the copyright in OSS is free to release there software under multiple licences. For example, software could be released under a standard proprietary licence and also an open source licence. MySQL, an OSS database, is currently licensed in this manner (see <http://www.mysql.com/products/mysql/index.html>).
- 7.2 **Choosing a licence.** The licence you should choose will depend on your objectives. Whether you are considering using OSS in your business, or you are considering releasing your software as OSS, care is needed in choosing the right licence. For example, as a developer, you will want to consider the extent to which you:
- 7.2.1 are happy for your software to be mixed with “non-free” software;
 - 7.2.2 would require credit for your work in any future modifications of the software;
 - 7.2.3 want to protect your reputation against poor quality modifications made to the software; and
 - 7.2.4 are happy with another operator incorporating your product within their product and then on-selling it.
- 7.3 All these issues can be dealt with by the type of OSS licence that is chosen.

8 Complying with the licence

- 8.1 Finally, if you're going to use OSS you need to play by the rules. OSS licences contain a number of requirements that must be complied with. For example, almost all open source licences will require that any copies of the software, and any modifications to the software, must include mandatory notices within the source code or in accompanying documentation (such as the warranty disclaimers mentioned above). The form of these notices are usually contained in the licence terms, along with details as to how any source code must be disclosed. If OSS is to be used, these obligations need to be complied with.

9 Conclusion

- 9.1 Any business intending to use open source needs to carefully weigh up the benefits and risks, from both a legal and commercial point of view. Of key importance is choosing the right open source licence. There are many licences available, and a careful review is necessary to ensure that the legalese reflects the objectives of the business.

Wigley & Company is a specialist technology (including IT and telecommunications), procurement and marketing law firm founded 11 years ago. With broad experience in acting for both vendors and purchasers, Wigley & Company understands the issues on “both sides of the fence”, and so assists its clients in achieving win-win outcomes.

While the firm acts extensively in the commercial sector, it also has a large public sector agency client base, and understands the unique needs of the public sector.

While mostly we work for large organisations, we also act for SMEs.

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