

markets, particularly commercial television, subscription television and print media. On this issue Mr Samuel has been quoted as saying:

“The ACCC could well be a major brake on cross-media acquisitions, particularly in the way

convergence now is starting to blur traditional lines of market definition that we had in the past...In the past we have consistently taken the view that if an electronic media network were to acquire a print media

network, well they were separate markets, and perhaps section 50 of the Trade Practices Act would not apply.”

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Open Source Software – Understanding the Risks

Nick Abrahams and Alan Arnott explore the legal issues associated with rolling out open source software solutions

INTRODUCTION

The use of open source software (OSS) is not just an issue for IT companies, it is an issue for all organisations. Most organisations' IT departments are probably using OSS in one way or another, and most likely they are making up their own minds about the legal issues involved. However, without proper risk analysis an organisation could face unpleasant consequences, including being forced to release its proprietary software to the open source community under the terms of an OSS licence. This could result in the disclosure of trade secrets to the general public. To mitigate the potential legal risks associated with developing, incorporating and deploying OSS code, organisations need to implement robust OSS policies that include effective risk management strategies encompassing both the proprietary software (i.e. Microsoft, Unix) and open source paradigms.

WHY IT'S HOT

OSS is gaining significant momentum as a result of the explosion of open source products onto the enterprise level software market. This is a frontier previously untapped by the OSS movement that is now receiving unprecedented support by public and private sectors organisations alike, most notably in relation to e-government initiatives.

In Australia, one only has to look at the run-up to the federal election, with the Labor, Liberal and Democratic parties having each issued releases endorsing OSS. Similarly, state government departments are rolling out open source,

An explanation of open source

Open source refers to the open-ended availability of source code (readable by humans) that is used by software developers and programmers to create computer applications. Source code is compiled or converted into an object code version (readable by computers). Under the traditional proprietary or “closed” source code model, when organisations licence software, they receive the object code but not the source code and so they are not able to read/manipulate the code unless they surreptitiously decompile (reverse engineer) the object code, which is almost always strictly prohibited. Open source reverses this restrictive approach, by attaching a copy of, or otherwise making available, the source code to end users with each copy of the final object code version of the software application.

the most prominent project being the New South Wales Government's recent decision to boost its OSS commitment to a minimum of \$40 million per annum in what is said to be the largest Australian public sector initiative ever focused on Linux, open source's flagship operating system. In the Australian Capital Territory, the legislature has even gone so far as to mandate under the *Government Procurement (Principles) Guideline 2002* that government entities consider OSS as far as applicable. Globally, the number of governments influenced by the undeniable benefits of open source is also extensive, ranging from Munich with its Linux (Linux for Munich) project to Malaysia's procurement policy which obliges government procurement departments to give preference to OSS “in situations where the advantages and disadvantages of OSS and proprietary software are equal”. The increasing prevalence of OSS means that all prudent organisations need to reassess their approaches to managing the associated commercial and legal risks.

PROS AND CONS

The primary benefit of using OSS, the majority of which is available for

downloading via the Internet, is that it can be accessed, added to, modified and reconfigured by potentially thousands if not millions of programmers. The result is a system that is conducive to the collaborative development of source code resulting in software, at least in theory, that is more robust and secure than proprietary code developed by one organisation alone. This freedom to access source code is often misinterpreted as software free of licensing fees. The “free” concept of OSS is the freedom to copy, modify and distribute, not free as in “free beer”. That is not to say that OSS cannot be free of licensing fees, which it often is. However, these savings are often abrogated by significant costs for ancillary services like maintenance and support.

Making source code available to potentially thousands of programmers undoubtedly makes it the biggest threat to the proprietary model ever. However, the “many eyes” benefit must be considered against a backdrop of significant risks, which if improperly managed, could leave an organisation vulnerable in a variety of circumstances. Further, there is now a heightened risk when using OSS as a result of a number of lawsuits launched by the SCO Group

Inc., against several OSS vendors and users. Further, it has been reported that Linux could potentially breach a number of patents held by various proprietary code companies, including Microsoft and IBM. These patents have not yet been used against Linux users/vendors but the possibility remains. This potential litigation risk should be considered in any OSS usage policy. It is possible to insure this risk.

Set out below is an analysis of some of the legal issues surrounding OSS. It is difficult to be definitive about these issues as much will depend on which OSS licence is used. At present, there are as many as 40+ such licences and it is open to a developer of a piece of OSS to use any licence, including drafting a new one.

REDISTRIBUTION OBLIGATIONS

It is generally understood that if an organisation creates and distributes some proprietary code and it "contains" OSS, then that proprietary code must be released to the open source community on the same terms as the original OSS licence. Therefore it is important that organisations understand to what extent OSS is used in the software it distributes. This is important for software vendors and organisations seeking to commercialise their software. Of more general concern are provisions in OSS licences which require proprietary code to be distributed where it contains OSS and is "distributed or published". It is uncertain what the word "published" means in this context. This could potentially mean that proprietary software that contains OSS and is used by an organisation for an internal application but is somehow made available (or "published") to an external party (e.g. a supply chain management solution which allows a company's suppliers access to the company's system) could trigger the redistribution obligation.

LACK OF WARRANTIES

Since OSS is developed by multiple contributors, there is the risk of infecting clean proprietary code with code that infringes third party intellectual property rights. Unlike proprietary software where end users can usually rely on a

5 Steps to OSS Risk Management

1. Audit the existing code base for OSS.
2. Establish an OSS register with copies of the licences for each piece of OSS used.
3. Formulate an OSS usage policy covering:
 - who is permitted to authorise use/licensing of OSS
 - who is permitted to access the source code for the licensed OSS
 - when can OSS source code be modified
 - when can any software developed by the organisation be distributed or published
 - procedures for engaging external software developers.
4. Educate employees.
5. Police compliance.

number of negotiated vendor representations, warranties and indemnities, the majority of open source licences disclaim all warranties as to quality, fitness for a particular purpose, the ownership of intellectual property and so forth. As a result the risks of copyright and patent infringement are borne by the user of the OSS. Whether the OSS licensee's stated exclusion of warranties is sufficient to exclude the effect of the implied warranties created by the *Trade Practices Act 1974* (Cth) is an interesting discussion and beyond the scope of this article.

NO VALID CONTRACT

Since the time when Carlill tried to enforce the Smoke Ball Company's promise, the element of consideration has been one of the prerequisites to an enforceable contract. However most OSS is licensed without fee, though there are some arguments that there are alternate forms of consideration.

EMPLOYEE ISSUES

For organisations, care should be taken to inform software developers (both employees and external developers) that they are not to incorporate OSS code into the organisation's proprietary software without approval. Organisations may require developers to sign an agreement that all code they contribute to projects is not open source and indemnify the organisation against any claims arising from any open source code they do include.

Care should also be taken to ensure developed code is kept within the organisation to avoid triggering the redistribution obligations. This is an issue as organisations need developers with OSS skills and, by definition, these developers will be part of the OSS community and will be used to contributing their work to the community. Organisations are likely to prefer that the code that is developed inhouse not be made available to the community. This restriction may not fit well with the developer's philosophical approach to software development. Therefore, contracts of employment should make clear which code developed by the employee is the property of the employer and not of the employee.

CONCLUSION

OSS is heralded as a utopian ideal. A world of programmers working to make software better and more flexible. Indeed its benefits are many, however, as OSS matures and is adopted widely, government and private sector organisations need to address the inherent risks and have a coherent strategy towards the use of OSS.

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