

State of Oregon



Open-Source Community of Practice

Acquisition and Use of Open-Source Software in Oregon State Government

Licensing and Procurement Analysis

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Executive Summary

This report constitutes the Open-Source Community of Practice (“OS CoP”) final analysis concerning critical license and procurement aspects of state agencies acquiring and using Open-Source Software in their environments (the “Report”).

Open-Source Software is a dynamic force in the information marketplace.

The State of Oregon understands and appreciates the dynamic force that Open-Source Software (“OSS”) brings to bear in the information resource marketplace. OSS is increasingly becoming a critical component of information enterprise strategies and infrastructures in local, state, national and global venues. It is also becoming a moneymaking and cost savings proposition, making it essential for private and public sector information technology organizations to understand the communities that develop OSS, and the entities that sell or otherwise distribute it.

Open-Source Software use is controlled through accompanying Software Licenses.

Unlike the typical situation with Closed-Source Software, the source code in OSS is freely available to users. However, like its proprietary counterpart, OSS use is governed by Software Licenses. Through these licenses, OSS authors control important aspects of Software use, including:

- Reproduction;
- Modification;
- Use; and
- Distribution

The Open Source Initiative (“OSI”) is a principal certifying body for OSS Software Licenses. OSI has certified between 50 and 60 different OSS license types. OSS users must become familiar with these assorted licenses. License provisions can obligate users to act or refrain from acting in particular ways regarding the use and re-distribution of the underlying applications.

The value inherent in the use of OSS must be balanced with the risks attendant to that use.

OSS development and distribution provide viable information systems solutions. OSS acquisition and use can produce a number of valuable benefits, including:

- Cost Savings;
- Ease of acquisition;
- Quicker time to production; and
- Enhanced ability for internal support and maintenance.

In obtaining these OSS benefits, private and public users must remove or at least minimize the risks attendant to random acquisition and use of the Software. Risks include:

- OSS License compliance issues;
- Inefficient maintenance and support;
- Security issues;
- Inconsistent “buy” decisions;
- Maverick products that don’t integrate and interoperate within the established architecture and enterprise;
- Failure to effect “Best Value” procurements;
- Failure to fully realize cost savings;
- Incomplete or non-existent technical, business and legal review; and
- Violation of applicable laws, regulations and policies.

The use of any Software creates risk. The challenge is to effectively manage the attendant risk in order to maximize the capture of benefits. The inherent value in OSS acquisition and use must be balanced with its attendant risks.

An enterprise Software acquisition and use policy is a “best practice” risk management tool.

Private and public sector experts agree that the principal Software risk management tool is an effective enterprise policy that drives simple and consistent understanding, practices and procedures concerning all key aspects of Software acquisition and use. Best practices prescribe the development and implementation of enterprise policies that provide consistent guidance and instruction concerning Software development, procurement, licensing, acceptable use, and distribution.

The State of Oregon is a fertile ground for OSS development, distribution and use.

Private and public sector organizations have staked out Oregon as a fertile ground for OSS development, use and distribution. Oregon state and local government entities are acquiring and using OSS in their daily operations. These organizations have acquired OSS through various means, including anonymous downloads from the Internet, specific Community-Source development projects, and the competitive procurement of bundled Software that includes OSS.

The State's acquisition of OSS is a procurement event, and government organizations must satisfy public purchasing requirements in connection with their acquisition of the OSS.

The State's acquisition and planned use of OSS is a procurement event. Even in a simple "no cost" download of OSS, a staff member must accept an accompanying Software License. The downloaded Software has value for the State, and the Software owner perceives value in the State-accepted license. The parties have each benefited and sacrificed in their mutual agreement to exchange valuable items. At a minimum, an "agreement" is formed.

The State has legal authority and the means to directly engage Software developers and suppliers in significant market research to generate enough information to make fully informed "buy" decisions concerning particular categories and types of Software. The laws, administrative rules and policies that implement this legal authority provide the State with a wide array of effective sourcing methods for the Best Value Procurement of goods and services, including Software regardless of its source.

The State may acquire and use OSS as appropriate for specific project and enterprise business objectives; but should do so only in compliance with applicable laws, administrative rules and policies.

The State should develop an enterprise Software risk management policy.

Enterprise policies concerning governmental acquisition and use of OSS are logical measures to manage the risks attendant to Software use. State agencies have adopted policies establishing various processes that govern the introduction and use of Software in their environments. However, there are no specific policies in place regarding the acquisition, use and distribution of OSS by state agencies. Therefore, it is possible that current practices regarding state government acquisition, use and distribution of OSS may not be optimal in reaching all prevailing business, legal and procurement objectives.

The State should develop an enterprise policy for Software acquisition and use that lists the common risks attendant to the acquisition and use of Software, including OSS, and which identifies the resources and procedures that agencies should use to help develop and implement safeguards to manage these risks. The State of Massachusetts has promulgated an Information Technology Acquisition Policy that mandates Best Value acquisitions from among proprietary, Open-Source and Community-Source products. The state has fortified its policy through development of an Open-Source "legal toolkit" and an OSS risk management analysis from its legal counsel.¹

¹ The Report includes copies of the Massachusetts IT Acquisition Policy and OSS Risk Management Analysis at Appendix K.

Introduction

Open-Source Software (“OSS”) development and distribution is a viable information systems solution. OSS is maturing in its diversity of offerings and technical functionality. It is having a growing impact and increasingly noticeable effect on the Software industry. A primary appeal is the possibility of developing or acquiring higher-quality Software at lower costs. Open-Source solutions are competing with an increasing range of Closed Source products in all markets. Information organizations and traditional Software suppliers must engage in enterprise planning and policy-making to leverage the best use of the opportunities presented by OSS.

International, federal, state and local governments are building acquisition and use policies, practices and standards concerning Open-Source products. Worldwide, the public sector has increased its interest in Open-Source products in the last few years. Information technology research and advisory experts recommend that public sector entities acquire Open-Source products through best value and total cost of ownership assessments in which desired OSS is compared to Closed-Source alternatives. Subject matter experts across the country also emphasize the need for governmental entities to establish enterprise Open-Source policies to maximize value and minimize risk.

The State of Oregon is a globally recognized leader in Open-Source innovation. Oregon is or has been home to the Open Source Development Lab, the Open Technology Business Center, and the Oregon State University Open Source Lab. In addition, Governor Kulongoski recognizes Open-Source as a key driver for Oregon’s economic development.

Open-Source represents a new business model for community-based development, maintenance and technology refresh of a broad range of Software applications. The basic premise of Open-Source Software is that end users should be provided the source code of information systems programs and should be free to use, share, modify and enhance Software products within the rights and obligations outlined in applicable OSS license agreements. The goal is widespread interoperability, permissive incorporation into new technologies and new systems, and control over the destiny of the systems employed by users and organizations.

Some Open-Source products are available royalty-free, although the precise rights and restrictions imposed on the Software depend upon the specific terms of the Open-Source Licenses under which the OSS is distributed. Like Closed-Source Software Licenses, Open-Source Licenses pose their own set of legal, business and technical issues for the users and the organizations employing these products. It is essential for private and public sector information technology organizations to understand the communities that develop OSS, and the entities that sell or otherwise distribute it.

The State Chief Information Officer Council established the Open-Source Community of Practice (“OS CoP”) to assess the general impact of OSS on state government operations

and to help make findings and recommendations capable of driving agencies towards effective uses of OSS in their information environments. The following three specific tasks were assigned the OS CoP for completion by December 31, 2007:

1. Develop a high level inventory that provides a glimpse into the current usage of Open-Source Software throughout state government.
2. Develop best practice processes and methodologies that agencies can use to evaluate Open-Source desktop Software solutions.
3. Conduct a legal and procurement analysis to develop recommendations for standard policies and methodologies concerning Open-Source Software acquisition and use; including without limitation development, distribution and procurement in compliance with State of Oregon law and regulation.

This Report documents the completion of the three tasks and recommends that the State develop and implement an enterprise policy concerning Software risk management, including Open-Source Software. The Report discloses the Open-Source research material that the OS CoP assembled and examined, and the findings and recommendations that flow from that examination. The core of the Report consists of the appendices that identify the research material.

The primary purpose of the Report is to serve as an index of relevant resources that touch on Open-Source. The Report narrative regarding licensing and procurement issues is not a substitute for legal advice from the State of Oregon Department of Justice or procurement advice from the Department of Administrative Services State Procurement Office and individual agency procurement offices.

Definitions

Acquisition: The general act of acquiring or obtaining some temporary or permanent means of access to and control over an object or service, or both.

Best Value: A particular item's value that reflects the perceived best trade-off between the item's Total Cost of Ownership and all relevant aspects of the item's performance; as assessed pursuant to ORS 279A.015(5) and OAR 125-246-0120(5).

Business Model: The manner and means through which products and services are made available or distributed to the public.

Closed-Source or CS: A Software development and distribution concept in which the Software source code is not normally available to the general public. The concept of Closed-Source allows Software developers to establish, maintain and control an exclusive proprietary interest in the source code that comprises particular Software.

Community-Source: A community coordination mechanism that builds on the practices of Open-Source communities. The community includes some organizations or institutions, usually higher education entities, which are committing their resources to the community, in the form of human and financial resources. The Software produced from these collective efforts is typically distributed through an approved Open Source Initiative ("OSI") license.

Copyleft: Copyleft is a copyright licensing arrangement in which an author surrenders some but not all rights under copyright law. Users avoid copyright infringement by perpetuating the same copyleft distribution scheme for any Derivative Works. It is an essential feature in Open-Source Licenses.

CSS: Closed-Source Software.

DAS: State of Oregon Department of Administrative Services.

DOJ: State of Oregon Department of Justice.

Derivative Work: A work based upon one or more pre-existing works. In the case of Software, physically modifying copyrighted source code creates a Derivative Work. Physical code modification includes actual revision of the program or translation of the program into another computer language.

EISPD: Enterprise Information Strategy and Policy Division.

Freeware: Closed and Open-Source Software, offered under a standard commercial license that can be downloaded, used and copied with little or no restriction, in which the author does not provide access to the source code.

Gift: The act of voluntarily transferring property to another made gratuitously and without consideration. Consideration is some right, interest, profit or benefit accruing to one party; or some forbearance, detriment, loss, or responsibility given, suffered or undertaken by another.

Intellectual Property or IP: A category of intangible rights protecting commercially valuable products of the human intellect comprised primarily of trademark, copyright, and patent rights, but also includes trade-secret rights, publicity rights, moral rights, and rights against unfair competition.

Open-Source or OS: A Software development and distribution concept in which the source code is normally available to the general public with limited intellectual property restrictions, i.e., licensing. The concept of Open-Source allows users to freely redistribute the Software, and its available source code, without modification; or to modify the subject Software content in consonance with applicable licensing permissions; i.e. Software License.

Open Standards: A publicly available standard having various use rights associated with it. The term “open” is sometimes restricted to royalty-free technologies. The term “standard” is sometimes restricted to technologies approved by formalized committees open to participation by all interested parties. These committees usually operate on a consensus basis. Open Standards are sometimes referred to as “open formats,” when specific formats are specified.

Open Systems: A computing and networking system or systems maintained by a consensus process; and comprised of interacting Software, hardware, and human components with well-defined, publicly available interfaces.

OSS: Open-Source Software.

Procurement: The Best Value acquisition of goods or services, or both, conducted in compliance with applicable State of Oregon law and regulation.²

Public Domain: The body of information and creativity regarded as part of America’s common cultural and intellectual legacy. The Public Domain includes works to which proprietary rights do not attach and works to which proprietary rights have expired. Anyone may use such works or exploit them for commercial or non-commercial purposes.

² DAS SPO defines “procurement” in its purchasing rules as, “the act of purchasing, leasing, renting or otherwise acquiring: Supplies and Services; Architectural, Engineering and Land Surveying Services, and Related Services; and Public Improvements. Procurement includes each function and procedure undertaken or required to be undertaken by an Authorized Agency to enter into a Public Contract, administer a Public Contract and obtain the performance of a Public Contract under the Public Contracting Code and these Rules. Procurement includes Contract Administration, and Contract Administration includes Amendments.” OAR 125-246-0110

Shareware: Trial Software that can be obtained by a user free-of-charge, typically via Internet download or complimentary discs, to try out a program before making a permanent purchase of that program at a specified cost.

Software: Computer programs comprised of a collection of instructions and data that describe tasks to be performed by *computers*. The term includes *application Software*, which perform productive tasks for users, *system Software*, which manage and control the hardware to run the necessary services for user-interfaces and applications, and *middleware* which controls and co-ordinates distributed systems.

Software License or License: Permission to use Software under certain terms that would be unlawful without said permission. Ownership in the Software is not transferred to the licensee.

SPO: State Procurement Office.

Total Cost of Ownership or TCO: The calculation of a commodity's full life cycle cost comprised of the sum of all direct and indirect costs related to the ownership or operation, or both, of the commodity. The concept is based upon full cost accounting that includes the initial cost of purchase and subsequent costs concerning all aspects related to the further use and maintenance of the commodity.

Viral License: In patent, trademark, and copyright practice, a license that applies identically to all Derivative Works. Viral Licenses are designed to spread widely in an uncontrolled manner. They assert control over intellectual property by restricting the terms of the license strictly but sub-licensing openly. Open-Source Licenses, in particular the GNU General Public License, are examples of Viral Licenses.

OSS: A Growing Force in the Information Marketplace

Open-Source Software is distinct from, but sometimes confused with Public Domain Software, Shareware, and Freeware. Like Closed-Source or proprietary Software, OSS is still governed by a license. However, OSS license terms give users more rights than traditional commercial Software.

In contrast, Public Domain Software is source code in which the author has expressly abandoned any intellectual property rights. The author surrenders his or her copyrights and other intellectual property rights. Users are allowed to modify, distribute, utilize and otherwise exploit the source code in any manner without giving any attribution to the author. Moreover, users may claim intellectual property protection on their modifications to the Public Domain source code. Similarly, Shareware and Freeware differ from OSS licensing in that the author offers a standard commercial license with special pricing terms, but does not give the user access to or the right to modify the source code.

Open-Source is a Software development concept designed to shift the focus of development and distribution from vendors to users. The basic premise of Open-Source Software is that end users should be provided the source code of information systems programs; and should be free to use, share, modify and enhance Software products according to the applicable OSS license agreements.

Open-Source Software is often available at no initial cost; reveals its source code; and permits users to modify the code and to distribute the application as modified. It is similar to the traditional proprietary Software model in that the author or owner retains its intellectual property rights, and enforces them through assorted Software Licenses.

Open-Source is a growing force in the information marketplace. Open-Source Software developers are generating a growing number of mature application, system and middleware offerings. Service and support outlets related to these maturing product lines are also on the rise. The growing force of Open-Source in the information marketplace is driving businesses, academic communities and government organizations to re-examine the traditional manner and means of their Software development, acquisition and use. OSS is embraced worldwide.

A majority of global companies use OSS and few Software companies could distribute their latest products without at least some reliance on Open-Source third-party components.³ Open-Source includes, among other products, the Linux operating system that runs most of the world's business applications; the Apache Web server that supports a majority of Web sites worldwide; the Firefox Web Browser used by countless organizations and individuals; and the Open Office productivity suite that competes

³ Java, Perl and PHP scripting languages, and the MySQL and Postgres databases are crucial components in Software development and system operation. They are all at least partially Open-Source.

against the Microsoft Office product line. Gartner currently forecasts that by the year 2011, upwards of 80% of commercial Software will contain elements of Open-Source.⁴

Local and national governments outside the United States are aggressively moving from proprietary to Open-Source Software. These transitions result from both legislative and non-legislative action, and are driven by disdain for restrictive Closed-Source licenses and a desire for dramatic cost savings. Through legislation or formal policy statements, some Asian, European, South American and Scandinavian governments have either mandated deployment of OSS or stated a preference for such deployments.⁵ The Open-Source movement has even helped spawn a political party in Sweden, the *Piratepartiet* (Pirate Party).⁶

Federal, state and local governments in the United States are also interested in introducing OSS into their information systems. However, they have been less aggressive than their foreign counterparts in making the move. Using Gartner parlance, some foreign governments have pursued OSS through “positive discrimination” policies. In contrast, government organizations in the United States seem to be moving towards policies of “inclusion” that provide for fair competition between Closed- and Open-Source Software products.

Examples of Open-Source compelling the American public sector to strategically plan for formal OSS acquisition and use in fair competition with alternative products, regardless of their source, include the federal government’s Office of Management and Budget (“OMB”) and the State of Massachusetts.

In its Memorandum 04-16 in 2004, the OMB reminded government purchasers of the importance of keeping Software procurements vendor neutral; and to evaluate Software, regardless of its character as proprietary or Open-Source, on an equal basis. Massachusetts has adopted an enterprise Information Technology Acquisition Policy, ITD-APP-02, that compels agency pursuit of Best Value Software acquisitions that consider all alternatives including “proprietary, open source and public sector code sharing.” A copy of the Massachusetts policy is included in the Report at Appendix K.

⁴ Gartner, Inc. is one of the world’s leading information technology research and advisory companies. The cited forecast is from Gartner’s Open Source Summit 2007. See Appendix A for the full list of Gartner Open-Source research articles examined for the CoP.

⁵ Gartner refers to this conduct as “positive discrimination.” The concept involves a range of action from preference to compulsion. Gartner has identified three other policy positions regarding Open-Source Software: “inclusion” (removing barriers that preclude Open-Source as a public procurement alternative); “participation” (including R&D investment or involvement in communities); and “resource pooling” (creating and actively supporting communities in the development of open-source applications). See, Di Maio, Andrea (2005). *Governments Move Toward Sounder Policies for Open-Source Software*. Gartner Research. Stamford, CT. April 11, 2005. G00126505.

⁶ Since its formation in Sweden, the Pirate Party has given rise to political parties under the same name in Europe and worldwide. The party has a simple three-part agenda: (i) fundamentally reform copyright law (limiting commercial restrictions to five years), (ii) abolishing the patent system, and (iii) ensuring maximum respect for individual privacy rights. The party is trying to elect representatives in European and Swedish parliaments.

OSS: The Business Models and Licenses that Government Organizations Will Engage

OSS is increasingly becoming a critical component of information enterprise strategies and infrastructures in local, state, national and global venues. It is also becoming a moneymaking and cost savings proposition, making it essential for private and public sector IT organizations to understand the communities that develop OSS, and the entities that sell or otherwise distribute it. Moreover, business and government must become familiar with the diverse OSS licenses that accompany products; and which obligate users to act or refrain from acting in particular ways regarding the use and re-distribution of the underlying products.

Business Models

The OS Community of developers, distributors and users is multi-faceted. The universal community includes:

- Ideologues;
- Disparate Collaborative Development Communities;
- Academic and Government Coalitions;
- Intellectual Property Adherents; and
- Commoditization and business-centric enterprises that engage in marketing, branding, service and support activities.

The typical OSS Distribution Model involves a simple “no-cost” download of Software from the Internet. However, there are growing business-centric OSS Distribution Models that include:

- **OSS and Services** (OSS at no initial cost and related Service and Support at cost);
- **OSS Mixed** (OSS with OS code base and Closed- Source or Proprietary add-ons);
- **Proprietary OSS** (Applications available with a more traditional proprietary license that authorizes users to modify the application without having to redistribute code changes to the public);
- **Integrated OSS** (Diverse OSS already integrated into more consumable units); and
- **Hardware and OSS** (Hardware manufacturers using OSS as a foundational component in system operation).
- **OS Risk Management Services** (Intellectual Property infringement risk shifting through provision of diverse services such as certified OS packages, governance

policy development, and purchase of insurance, indemnification and code replacement agreements).

“Community-Source” is not necessarily an emerging business-centric model, but merits some discussion in this section of the Report. It may be helpful to view Community-Source as a subset of OS. Its unique feature is that many of the Software development investments of human resources, financial resources, technical design, and governance come from institutional contributions rather than from individuals. Colleges, universities, and commercial firms partner to form purposeful, organized communities.

The Sakai Project is an example of Community-Source. It is a community of academic institutions, commercial organizations and individuals who work together to develop a common collaboration and learning environment tool. The community has developed an educational Software platform distributed under the Open Source Initiative’s Educational Community License.

One finds an emerging variation on Community-Source in the growth of “public sector code sharing” collaboratives like the Government Open Code Collaborative (“GOCC”).⁷ The GOCC is comprised of the Commonwealth of Massachusetts Information Technology Division; the Rhode Island Office of the Secretary of State; the Pennsylvania Office of Information Technology; the Utah Governor’s Office, CIO Section; the Office of the Kansas Secretary of State; the Kansas Treasurer’s Office; the Missouri Secretary of State’s Office; the West Virginia Auditor’s Office; the City of Gloucester, MA; the City of Worcester, MA; and the City of Newport News, VA.

The GOCC is a voluntary collaboration between public sector entities and non-profit academic institutions. Its purpose is to encourage the sharing, at no cost, of computer code developed for and by government entities. GOCC members are able to designate access rights for the code they donate. They can designate access by members only, by members and observers, or by members, observers, and the general public.

Software Licenses

Open-Source and Closed-Source licenses govern the use of Software. Software is protected by a variety of intellectual property rights, including copyright, patent, and trade secret law. These laws grant Software owners exclusive rights regarding the use, distribution, reproduction, and modification of their Software. These owners may then grant users certain permissions to the Software under specific conditions through licenses. The users are legally responsible for complying with the applicable license terms. There is legal and business risk attached to a user’s noncompliance. For example, violation of the license likely results in automatic revocation, requiring the infringer to immediately cease use of the Software.

⁷ This is the type of organization referred to in the Massachusetts IT Acquisition Policy at Appendix K.

1. Free Software Foundation and Open Source Initiative

The **Free Software Foundation (“FSF”)** is a non-profit organization formed to support a Copyleft-based movement that aims to promote computer users' rights to freely use, study, copy, modify, and redistribute modified computer programs. The FSF is the creator, publisher and enforcer of the GNU General Public and Lesser General Public Licenses. The organization maintains the Free Software Definition. The concept of “Free Software” is distinct from the concept of “Open-Source” in that OS accepts some license restrictions that the FSF deems too restrictive. This Report focuses on Open-Source and its definition as maintained by the Open Source Initiative.

A significant portion of Open-Source Software is certified by the **Open Source Initiative (“OSI”)**. OSI is a non-profit corporation formed to educate about and advocate for the benefits of Open-Source. The organization also serves as a standards body working to maintain the integrity of the Open-Source Definition.

Through the Open-Source Definition, OSI identifies the ten minimum requirements that are necessary to obtain license certification:

- The license cannot restrict any party from selling or giving away the Software as a component of an aggregate Software program containing source code from other sources. The license cannot require a royalty or other fee for such a sale.
- The program must include the source code and allow for the distribution of the source code, including distribution in compiled form. If the product is only distributed in binary form, there must be well-publicized ways of obtaining the source code in a reasonable manner that is cost neutral or fair. The source code must be available in a format that facilitates program modification.
- The license must allow for modifications and Derivative Works. Derivative Works must be distributed under the same license terms as the original Software.
- The license may restrict the source code from being distributed in modified form only if the license allows the distribution of “patch files” with the source code for the purposes of modifying the program at build time. The license must explicitly permit distribution of the Software from modified source code. The license may require Derivative Works to carry a different name or version number from the original Software.
- The license cannot discriminate against any person.
- The license cannot restrict anyone from using the program in a specific field.
- The rights attached to the program must apply to all to whom the program is redistributed without the need for execution of an additional license by those parties.

- The license rights attached to a program must not depend on the program's being part of a particular Software distribution. All parties to whom the program is redistributed should have the same rights as those that are granted in conjunction with the original Software.
- The license must not place restrictions on other Software that is distributed along with the licensed Software.
- No provision of the license may be conditioned or based on any individual technology or style interface.

2. OSI-certified Licenses

The primary and foundational factors of OSI-certified OSS licenses are:

- No prohibition on distribution and no fee associated with distribution;
- Source code must be made available; and
- Modifications to the source code must be permitted.

Currently, there are approximately 60 OSI-certified Open-Source licenses and countless non-OSI certified "open" licenses. This Report limits discussion to the most widely-used OSI-certified licenses. The current list of OSI licenses is included at Appendix E. The OSI Web site includes detailed information about the features and attributes of each of its certified license types. The State of Massachusetts Information Services Web site includes an Excel spreadsheet that summarizes the features and attributes of each license type.

A. THE GNU GENERAL PUBLIC LICENSE ("GPL")

The GPL is one of the most widely known and used OSI-certified licenses. Roughly 85% of OSS uses the GPL. OSI has certified three versions of the GPL. The GPL V.2 is the most popular.

THE GPL V.2:

In its preamble, the GPL V.2 stresses the critical importance of every user's freedom to change and share Software source code. This feature is the antithesis of Closed-Source Software licenses. The provisions of the GPL V.2 forbid anyone to deny these freedoms or to ask users to surrender them. The GPL V.2 disclaims warranties and requires that any patents must be licensed for everyone's free use. The license specifically covers the rights to copy, distribute, and modify the source code.

Under Section 1, licensed users may copy and distribute verbatim copies of source code as it is received. In order to legitimately exercise this privilege they must: (i) conspicuously publish on each copy an appropriate copyright notice and disclaimer of warranty; (ii) keep intact all notices that refer to the license and any absence of warranty;

and (iii) give any other recipient of the program a copy of the license along with the program. The transferring user may charge a fee for the physical act of transferring a copy or for providing a warranty, or both.

Under Section 2, licensed users may modify the program or any portion of it and distribute the modifications under the terms set forth in Section 1. Each modified file must carry a notice detailing the changed file and the date of the change. Each work that is distributed or published in whole or part that contains or is derived from the program must be licensed as a whole at no charge to third parties under the terms of the GPL. However, there are limits to this “viral license” impact. Identifiable sections of the work that are not derived from the Software are not covered by the license when distributed as separate works.

Moreover, the mere aggregation of the GPL program on a storage or distribution mechanism with another work not based on a GPL program does not bring the other work under the scope of the license. Likewise, placing a GPL program on a CD-ROM with non-GPL programs does not have any effect on either program.

Unfortunately, the precise amount of integration or combination that would make proprietary code part of a “work based upon a program” under the license is not expressly outlined in the GPL, and has led to reasonable disagreement on the subject. Advice and counsel from an organization’s attorneys are critical on this matter.

Under Section 3, licensed users must distribute the object code or executable code along with the source code, or otherwise make the source code readily available through a written offer. Anyone can request the source code through the offer. All requests must be honored.

Under Section 4, a user’s license rights terminate in the case of any attempt to copy, modify, sublicense or distribute a program except as provided for under the GPL. Downstream parties who have received rights under the GPL do not have their licenses terminated if they are in full compliance with applicable GPL provisions.

Under Section 5, the license makes it clear that no licensed user’s signature is required and that the simple act of modifying or distributing the program, or any work based upon a program, indicates acceptance of the license and all GPL terms.

Under Sections 7 and 8, licensed users are obligated to license any patent related to Derivative Works for the benefit of all.

Under Section 11, the GPL indicates that the program is provided “as-is” with no warranties to the extent permitted by law.

Under Section 12, there is a liability waiver. The section provides that the copyright holder, or any other party who modifies or redistributes the program in accordance with the license, will not be liable for damages. This waiver includes general, special, incidental or consequential damages arising out the use or inability to use the program; even if the holder has been advised of the possibility of such damages.

THE GPL V.3:

On June 29, 2007, the Free Software Foundation published the final, official new version of the GPL. The new version was the subject of intense public comment and debate during multiple drafting rounds.

GPL V. 3 key changes include: (i) new approach to patents, including an explicit patent license and patent non-assertion clause; (ii) a new requirement that companies conveying GPL-covered code in user products provide the information necessary to install modified versions on those products; (iii) a new approach to digital rights management (“DRM”), including an express waiver of anti-circumvention rights; and (iv) new language implementing the GPL’s application.

Concerning Patent Terms, the GPL V.3 provides that those who modify or otherwise contribute to GPL Software are deemed to grant a royalty-free, non-exclusive, worldwide patent license under their patent claims (those claims which the contributor owns or controls that others would infringe if they were to use the Software as the GPL license permits) when they distribute that Software. This license applies to the entire contributor version of the programs the contributor distributes; not just the portions they contribute. A contributor’s express patent license is considered perpetual. The GPL V.2 does not contain an express patent license like this.

Concerning User Products Installation Information, distributors who convey GPL Software for use in user products (e.g., consumer electronics products) in conjunction with the sale or lease of the product must include installation information for the corresponding source code. This information is designed to allow the user to install and run modified versions of the distributed code on the user product. Exemptions are made for certain situations where no one, even the distributor, can install modified code in the user product (e.g. when source code is burned into a chip and cannot be modified). The GPL V.2 does not expressly reflect this requirement.

Concerning Anti-Circumvention, those who distribute GPL Software waive their rights to prevent circumvention of DRM technology. Distributors are prohibited from using anti-circumvention legal rights to prevent users from modifying GPL Software. The GPL V.2 does not expressly prohibit the exercise of anti-circumvention legal rights.

Concerning application of the GPL, its terms apply to modified works, now defined to include copying or adapting any part of a work licensed under the GPL that would otherwise require copyright permission (other than making a verbatim copy). The GPL V. 2 focused on code “derived” from, “based” on, or “containing” code distributed under the GPL. GPL V.3 introduces the term “conveying” to describe activities that bring more modified works under the license.

The mere interaction with a user through a computer network with no transfer of a copy is excluded from the definition of “conveyance.” This means that application service providers and Web-hosted applications are probably not required to publish their source code (since that interaction is not considered a conveyance or distribution).

Licensed users have explicit permission to convey GPL Software to others for the sole purpose of having them make modifications exclusively for that user, or providing that user with facilities for running those works. This permission extends only to the facility where contractors make or run the Software at the users' direction and control, and on terms that prohibit them from making any copies of the Software.

When distributors distribute works containing GPL Software, they must provide all of the source code necessary to modify the works and generate, install, and run their object code. This distribution requirement includes any shared libraries and dynamically linked subprograms that the work is specifically designed to require (by intimate data communication or control flow between those subprograms and other parts of the work).

B. THE GNU LESSER GENERAL PUBLIC LICENSE ("LGPL")

The most important difference between the LGPL and the GPL is the way in which the LGPL treats Software libraries and governs distribution requirements associated with the modification of Software libraries. Distribution requirements for modification to Software libraries depend on whether the modifications were based on the library or works that use the library.

Concerning Works Based on the Library, the distributor can distribute works containing code derived or modified from the library only if (i) the modified work is a library, (ii) it contains notice of the modifications and dates of modification, (iii) the entire work is licensed under the LGPL at no charge, and (iv) the distributor makes a good faith effort for the modified library to perform independently in the event the application is unable to do so.

Concerning Works that Use the Library (i.e., works that have source code that does not include any modifications or derivatives based off the library source code, but that are designed to work with the LGPL library by being compiled or linked with it), the distributor may choose which license to distribute the modifications under as long as the license allows modifications of the work for the customer's own use and reverse engineering for debugging the modifications. In addition, the distributors must provide adequate notice to downstream users that the LGPL library is covered by the LGPL. They must also take reasonable steps to ensure that downstream users have access to the source code for those LGPL libraries.

C. THE BERKELEY SOFTWARE DISTRIBUTION ("BSD") LICENSE & BSD STYLE LICENSES

The BSD license or BSD style licenses are generally considered the least restrictive of the Open-Source licenses. Many consider the **Apache license** a relative of the BSD license. These licenses allow for redistribution and use of the source code and object code as long as the redistributed Software retains the copyright notice, any other notices, the disclaimer of warranties, and the limitation of liability clauses.

Older versions of the BSD and BSD style licenses also included certain attribution requirements, such as mandatory attribution and the naming of contributors in advertising of the Software. Recent revisions have eliminated most of these attribution requirements. However, users should be careful to determine which BSD license is applicable in order to ensure full compliance.

Unlike the GPL, BSD licenses permit coders to release modifications and derivatives of the original source code under whatever license they may choose, including licenses entirely different from the terms set forth in BSD style licenses.

D. THE MOZILLA PUBLIC LICENSE (“MPL”)

In many ways, the MPL is a model of Open-Source licensing for commercial Software entities. The MPL is considered to be a combination of the GPL and the BSD. One of its most significant features is the ability to combine proprietary Software with Open-Source code without requiring the proprietary Software to be licensed under Open-Source license terms. Here are some of the key elements of the MPL:

- Allows proprietary Software companies to protect their proprietary code from being subjected to Open-Source license terms by putting it in files separate from any MPL or modified MPL code. But, to the extent the MPL code (modified or unmodified) is included in the same file as proprietary Software; the MPL provisions are applicable to the proprietary Software.
- Commercial licensing of derivative and modified works is permitted. Royalties can be charged for modified and Derivative Works.
- Changes to the covered source code must be made freely available to anyone.
- Specifically grants a patent license. Contributors (those that develop modifications to the covered code) grant a world-wide, royalty-free, non-exclusive patent license to use, sell, offer to sell, have made or otherwise dispose of not only the modifications made by the contributor, but also the combination of modifications made by that contributor with the original MPL source code.
- Allows additional warranties to downstream users, but may trigger an indemnification obligation to the original developer for any claims arising as a result. May include an attorney’s fees provision under such conditions.
- License can be terminated automatically for breach of the license terms and failure to cure within 30 days of knowledge of the breach. The license can also be terminated if the licensee commences patent infringement litigation against the initial MPL author or any subsequent contributor.

3. Internal Use of Modified GPL Programs Does Not Require Public Disclosure of Modified Source Code

Licensed users are free to make modifications to GPL programs and use them privately. When they use their modified GPL applications in private, they do not have to disclose and distribute their modifications to the public. This permission for unfettered internal use applies to individuals, governmental entities⁸ and businesses. An organization may modify GPL source code and use it internally⁹ without any obligation to make it available to the public. However, after a user organization's "external" release of its modified source code in some way, the GPL compels its release to the world.

The Freedom Software Foundation Web site reveals helpful answers to "frequently asked questions" ("FAQ") concerning the use of GPL programs. The Report includes a list of selected FAQ responses at Appendix F.

⁸ In certain limited respects, there may be less risk for government OSS users than for their private sector counterparts. For example, a state's sovereign immunity may help insulate it from having to pay money damages for Intellectual Property infringement.

⁹ It seems clear that intra-agency sharing of GPL Software is "internal" use. It is possible that in some situations inter-agency sharing of GPL programs may also be construed as internal use.

The Value and Risk of OSS Acquisition and Use in the Public Sector

Oregon recognizes that:

- OSS development and distribution provide viable information systems solutions;
- OSS is maturing in its diversity of offerings and technical functionality, and is having a growing impact and increasingly noticeable effect on the Software industry;
- Developing or acquiring higher-quality Software at lower costs may serve the public interest; and
- Open-Source solutions increasingly compete with a broad range of Closed-Source products in all markets.

Accordingly, Oregon has already evidenced a rich investment in the OS community. Governor Kulongoski has declared that OS is a key driver for the State's economic development. The State serves as the location for globally-recognized Open-Source organizations including:

- Linux Foundation;
- Open Technology Business Center; and
- Oregon State University Open Source Lab (OSU OSL), which hosts the Linux kernel, among other OS technologies, and the annual Government Open Source Conference (GOSCON).

Notwithstanding the current absence of a formal OSS acquisition and use policy, State Government has acquired and uses OSS in agency environments. The State desires to leverage its OSS investment to better realize the value inherent in the Software. Benefits include:

- Cost Savings;
- Ease of acquisition;
- Quicker time to production; and
- Enhanced ability for internal support and maintenance.

In reaping OSS benefits, the State must remove or minimize its risk attendant to random acquisition and use of the Software. These risks include:

- OSS License compliance issues;
- Inefficient maintenance and support;
- Security issues;

- Inconsistent “buy” decisions;
- Maverick products that don’t integrate and interoperate within the established architecture and enterprise;
- Failure to fully realize cost savings;
- Incomplete or non-existent technical, business and legal review; and
- Violation of applicable law, regulation and policy.

The risk of litigation over Intellectual Property rights infringement cannot be over-emphasized. There is good discussion about this issue in the State of Massachusetts OSS Risk Management Analysis attached to the Report at Appendix K. Consequences for Intellectual Property infringement include injunctive relief and money damages. State government sovereign immunity and tort claim limits may diminish the impact of money damages, but may not inhibit the force and effect of restraining orders and injunctions that could shut down system operations.

Current Acquisition and Use of OSS in State Government in Oregon

State government in Oregon has acquired and uses OSS. Over time, the products have appeared through multiple avenues in diverse State Agencies. The typical acquisition scenario may be a technician's perceived "no-dollar" cost download of particular OSS, or the use of other Software (for example, Freeware or Closed-Source Software) with embedded OSS, for some specific operational need. The Software has remained because of the business or technical value perceived in its continued use, instance by instance.

Most employees have likely perceived this transaction as a gift with no strings attached.¹⁰ They probably did not regard the event as a formal or even informal procurement matter. Where the transaction was punctuated with an employee's acceptance of an accompanying Software License, this assessment may not be supported by applicable law. Acceptance of the accompanying license may be considered as valuable consideration in exchange for use of the downloaded Software. The Software constitutes valuable intellectual property. The parties have each benefited and sacrificed in their mutual agreement to exchange valuable items. At a minimum, an "agreement" is formed.

The simple download of OSS in exchange for acceptance of a Software License implicates procurement issues and considerations for resolution through authorized procurement authorities and sourcing methods. The State's challenge is to establish the right policy and governance that will standardize OSS acquisition and use in compliance with law and regulation in order to minimize risk and maximize the Software's inherent benefits for the good of the public.

¹⁰ The State's current law does not recognize the concept of "gift" separately from the concepts of "purchase" or "procurement." ORS 71.2010(32), ORS 279A.010(u), and ORS 279B.050.

Future Acquisition and Use of OSS in State Government in Oregon

Worldwide, the public sector has increased its interest in OS products. Subject matter experts across the country emphasize the need for governmental entities to establish enterprise OS policies to maximize value and minimize risk. Accordingly, international, federal, state and local governments are developing formal acquisition and use policies, practices and standards concerning OSS. Moreover, information technology research and advisory experts recommend that public sector entities acquire OSS through Best Value and Total Cost of Ownership assessments, comparing Open-Source solutions to Closed-Source alternatives.

Policy

Likewise, the State of Oregon will need to have a formal acquisition and use policy for OSS in place to maximize the utility of OSS use in all respects, including among other things:

- Functionality;
- Integration;
- Interoperability;
- Management of acquisitions through a common efficient process;
- Efficient management of acquired assets;
- Ensuring license compliance; and
- Ensuring compliance with the State's enterprise business objectives and public procurement law and rules.

The policy should be the logical product of a best practice assessment, development and implementation.¹¹ It should also be subject to the legal framework within which State Agencies must operate, including State procurement law.

Through an assessment phase, the State will determine the best policy design; and define its OSS user profile against the backdrop of its known and anticipated enterprise objectives, existing and ideal architecture, and all applicable compliance requirements. The State's OSS user profile is comprised in part by its:

- Current Inventory of OSS;
- Current manner and means of acquisition of the Inventory;
- Current deployment and particular uses of Inventory components;
- Breadth and depth of employee experience in the use of the Inventory;

¹¹ This discussion is adapted from Bernard Golden's White Paper entitled, "Creating and Implementing an Open Source Policy: Managing Use and Reducing Risk." Bernard Golden is the founder and CEO of NAVICA, a leading Open-Source management consulting firm. Mr. Golden's policy-making model is structured around a five-phased approach that includes: *Evaluate, Create, Audit, Educate and Monitor*. That exact approach should be modified to align with required government processes in Oregon.

- Future needs and plans related to Inventory components;
- Character of licenses attached to Inventory components; and
- Risk related to assessment findings, e.g., license compliance issues.

Through a development phase, the State should draft a written policy designed to meet all needs identified in the assessment. The written policy should be applicable to the affected enterprise. It should also include provisions that authorize and guide supplementation by individual agencies for agency-specific needs. The policy will impact State information resources and will have to be promulgated through a rulemaking process, or otherwise as mandated by the Administrative Procedures Act provisions applicable to State Agencies.¹²

In the implementation phase the State should implement the policy through a project management process that will ensure:

- Coordinated rollout;
- Existing staff awareness;
- Integration of training for new staff; and
- Periodic monitored policy evaluation.

The final policy should integrate with the State's existing procurement processes, which are sufficiently flexible and scalable to accommodate fair competitive acquisition of Best Value products, regardless of their source.¹³

Procurement

This section provides background procurement information for this analysis only and should not be relied upon in the course of procurement because statutes, rules and policies may change from time to time.

The State's procurement processes are subject to the following legal framework:

- United States Constitution
- Federal Statutes
- Federal Regulations and Administrative Rules
- Federal Case Law
- Oregon Constitution
- State Statutes
- State Case Law
- Oregon Administrative Rules
- Policy
- Procedures
- Contract Terms and Conditions

¹² In ORS 291.038, the State Legislature requires that DAS establish by rulemaking any standards and policies that affect the State's information resources.

¹³ The State of Massachusetts enterprise IT Acquisition Policy is a good conceptual model to adapt to Oregon's efforts to promulgate a statewide policy concerning acquisition of Software, including Open-Source.

The State Legislature revised the public procurement code, effective since 2005, to help move the public purchasing process from selection methodologies focused on lowest cost to purchasing strategies designed to buy perceived Best Value (with cost as only one of many value factors to be considered). The Legislature has asserted that the State’s policy in enacting a procurement code should:

- Simplify, clarify and modernize procurement practices to reflect the marketplace and industry standards;
- Instill public confidence through ethical and fair dealing, honesty and good faith on the part of government officials and those who do business with the government;
- Promote efficient use of state and local government resources;
- Allow impartial and open competition, protecting both the integrity of the public contracting process and the competitive nature of public procurement.
- Obtain meaningful competition in arriving at “best value” through evaluation of performance factors and other aspects of service and product quality, in addition to pricing;
- Provide a public contracting structure that can take full advantage of evolving procurement methods as they emerge within various industries;
- Provide effective outcomes that represent optimal value to contracting agencies and, to the greatest extent feasible, be consistent with market practices;
- Seek consistency in procurement practices between contracting agencies covered under the public contracting code while preserving each contracting agency’s ability to adopt rules to maximize the contracting agency’s effectiveness; and
- Apply innovative practices while maintaining quality and integrity.¹⁴

The Department of Justice and State Procurement Officials have modified purchasing rules to implement the new procurement code. The new rules form the backbone of a supple, adaptable procurement process that guides agencies from research and planning, through management of public solicitations, to Best Value awards and contract administration.

1. Procurement Rules

The public procurement code (“Code”) is divided into three chapters in the ORS. ORS Chapter 279A sets out general Code provisions. Under Chapter 279B, the Legislature prescribes the Code provisions applicable to the acquisition of goods and services. Provisions in Chapter 279C guide procurements for public improvements and other construction services; architectural and engineering services; and land surveyor and related services. The acquisition of Software is subject to ORS Chapters 279A and 279B.

¹⁴ See ORS 279A.015 and 279B.010

The Department of Justice is required to develop and maintain model administrative rules of Code procedure (“Model Rules”) for all state agencies that are subject to the Code.¹⁵ Unless they adopt their own rules of procedure related to the Code, all subject agencies must follow the Model Rules.¹⁶ However, the Department of Administrative Services has purchasing authority under the Code for all state agencies that are not otherwise granted their own statutory contracting authority (“DAS Contracting Agencies”).¹⁷ DAS has chosen to adopt its own rules of procedure under the Code (“DAS Rules”). DAS Contracting Agencies follow the DAS Rules in connection with their public purchasing activities. The remaining discussion under “Procurement” in this Report will focus on concepts from the Code that both the Model Rules¹⁸ and DAS Rules¹⁹ address.

2. Market Research and Planning Activity

State Agencies may use non-competitive means of Requests for Information (“RFI”) or Requests for Qualifications (“RFQ”) to engage both Closed- and Open- Source Software distributors in market research. Market research is designed to assist agencies in their planning activities related to desired or anticipated Software acquisitions. Agencies are encouraged to conduct market research with suppliers who may be able to meet current or anticipated needs. Market research includes, but is not limited to:

- Reviewing trade journals, internet, newspaper, etc;
- Meetings;
- Industry presentations; and
- Particular supplier demonstrations.

The opportunity for this direct interface ends when the agency releases a solicitation for the subject product or service. An agency may use an RFI to assess the availability of particular products or services, or both, and to define the broadest pool of potential suppliers to meet the need. The RFQ process is a research vehicle through which an agency can try to determine the actual size of the pool of potential suppliers who may be most qualified to meet a stated need. There is a distinction between an RFQ used for research, and one expressly released to “pre-qualify” suppliers. The latter is a

¹⁵ ORS 279A.065(1). Following each legislative session, DOJ must review all laws affecting the Code passed by the Legislative Assembly to determine whether to modify the Model Rules.

¹⁶ ORS 279A.065(5) and 279A.070.

¹⁷ ORS 279A.050(2).

¹⁸ The Model Rules that apply to Software acquisitions are Divisions 046 (General Provisions Related to Public Contracting) and 047 (Public Procurement of Goods or Services) in Chapter 137 of the Oregon Administrative Rules. A table of contents for these rules is set out as a road map at Appendix I.

¹⁹ The DAS Rules that apply to Software acquisitions are Divisions 055 (State Purchasing), 246 (General Provisions Related to Public Contracting) and 247 (Public Procurement of Supplies and Services) in Chapter 125 of the Oregon Administrative Rules. A table of contents for these rules is set out as a road map at Appendix J.

procurement vehicle, and its release has the same effect as the agency's release of a solicitation, e.g., an RFP.

These research and planning processes do not directly lead to Procurement. However, they may generate information that assists agencies in determining how best to make a “buy” decision through a sourcing method for the Procurement of supplies and services. These sourcing methods include²⁰:

- Competitive Sealed Bids and Multistep Bidding (Invitation to Bid – ITB);
- Competitive Sealed Proposals, Competitive Range and Multistep Proposals (Request for Proposals – RFP);
- Small Procurements;
- Intermediate Procurements;
- Sole Source Procurements;
- Emergency Procurements; and
- Special Procurements.

3. Sourcing Methods

Contracting agencies in Oregon must use one of the sourcing methods permitted by ORS 279A or ORS 279B to award contracts for goods and services. They typically award contracts for goods and services valued at more than \$150,000.00²¹ through formal, competitive sealed bid or sealed proposal solicitations. These formal solicitations require Department of Justice legal review and approval²², public notice, and opportunities for protest and judicial review.²³

The Code provides for exceptions to this general rule for: small and intermediate procurements; sole source procurements; emergency procurements; and special procurements.²⁴ Agencies typically award contracts for goods and services valued at under \$150,000.00 through small or intermediate procurements. These informal solicitations require Department of Justice legal review and approval for contracts that are valued over \$100,000 but lack public notice, protest and judicial review opportunity

²⁰ The seven most common available sourcing methods are listed. Agencies may consider additional sourcing methods if available, including purchases through federal programs (ORS 279A.180) and cooperative procurements (ORS 279A.200-279A.225).

²¹ In determining which procurement dollar thresholds apply to a planned purchase of Goods and Services, agencies should consider prevailing market prices in establishing the value of the desired Goods and Services (whether or not money will actually change hands in the planned transaction).

²² For contracts that are valued over \$100,000.

²³ In the case of desired information resource acquisitions beyond certain dollar thresholds, there may be additional administrative requirements imposed under DAS EISPD policy. Link to http://oregon.gov/DAS/EISPD/ITIP/pol_index.shtml#Statewide IT Policies

²⁴ ORS 279B.065 through 279B.085.

requirements. However, a procurement can not be artificially divided or fragmented so as to constitute either a small or intermediate procurement.

A. COMPETITIVE SEALED BIDS (ORS 279B.055)

An Invitation to Bid (ITB) is used to initiate a competitive sealed bidding solicitation for bids to provide desired goods and services in compliance with stated requirements at specific prices. The ITB must contain certain provisions, including among other items the specifications and applicable contract terms and conditions. Negotiations over these terms and conditions are usually prohibited. Price is the primary selection criterion.

Contract award, if any, goes to the lowest bid from a responsive and responsible bidder. An ITB may be issued for single-step or multi-step evaluation. In a multi-step ITB, the initial bid submissions do not include price. The contracting agency reviews bidders' qualifications and their capacity to perform. Thereafter, the agency may require priced submissions from all or some of the original bidders.

B. COMPETITIVE SEALED PROPOSALS (ORS 279B.060)

A Request for Proposals (RFP) is used to initiate a competitive sealed proposal solicitation for proposals to provide desired goods and services in compliance with stated requirements at specific prices. Like an ITB, the RFP must contain certain provisions, including among other items, specifications, a statement of work and applicable contract terms and conditions. Contrary to practice in an ITB solicitation, contracting agencies soliciting for goods and services through an RFP process may negotiate items with the proposers.

A contracting agency may establish a "competitive range" of proposers for the purpose of discussions and negotiations. The competitive range may be comprised of all or only some of the original proposers. Price may be only one of several selection criteria that the contracting agency considers in determining a contract award. Like ITBs, RFPs may be issued for single-step or multi-step evaluation.

Contract award, if any, goes to the responsive, responsible proposer whose proposal the contracting agency determines in writing to be the most advantageous to the contracting agency. The agency's determination must be based on the evaluation process and evaluation factors described in the RFP, any applicable preferences described in ORS 279A.120 (preference for Oregon goods and services) and 279A.125 (preference for recycled materials) and, when applicable, the outcome of any negotiations authorized by the RFP.

C. SMALL PROCUREMENTS (ORS 279B.065)

When a contracting agency determines that it can fulfill a need for goods and services for \$5,000.00 or less, the agency may forego pursuit of a competitive solicitation for bids or proposals. The agency may award a small procurement in any manner deemed practical or convenient by the contracting agency, including by direct selection or award.

Competition is still encouraged through informal quotes, but not required. The agency may deal directly with a single supplier.

D. INTERMEDIATE PROCUREMENTS (ORS 279B.070)

In situations where contracting agencies determine that they can satisfy their needs for goods and services in a value range between \$5,000.00 and \$150,000.00, they may pursue informal means of competition via oral quotes or proposals from at least three suppliers. Under the Model Rules and DAS Rules, however, when the contract value is likely to reach \$75,000.00 or more, agencies must use a written solicitation to ask for offers. OAR 137-047-0270 (Model Rule); OAR 125-247-0270 (DAS Rule). Under DAS Rules, the agency must also provide public notice of the contracting opportunity. OAR 125-247-0270.

The Model Rules' and the DAS Rules' requirement for a written solicitation may be satisfied with a Request for Quotes, ITB or RFP. In the reasonable absence of three quotes or proposals agencies may still award contracts, but they must make a written record of their efforts to obtain offers. Ultimately, agencies should award intermediate procurement contracts on the basis of the quotes or proposals that best serve their interests. Award decisions should be based upon considerations of price, experience, expertise, product functionality, and suitability to perform the required services or to provide the needed goods.

E. SOLE SOURCE PROCUREMENTS (ORS 279B.075)

Contracting agencies may award contracts for goods or services without competition when DAS or the agency with appropriate procurement authority determines in writing that the goods or services, or class of goods or services, are available from only one source.²⁵ The determination of a sole source must be based on at least one of the following written findings that:

- The efficient utilization of existing goods requires the acquisition of compatible goods or services;
- The goods or services required for the exchange of Software or data with other public or private agencies are available from only one source;
- The goods or services are for use in a pilot or an experimental project; or
- Other findings support the conclusion that the goods or services are available from only one source.

A sole source vendor may have all the negotiating leverage in the bargain. Nonetheless, contracting agencies using this sourcing method must work with reasonable practicality to secure contract terms that are the most advantageous to the State.

In a variation of the sole source theme, the Code authorizes contracting agencies in

²⁵ Agencies enabled by statute or express DAS delegation to contract under their own authority may make sole source determinations without DAS involvement.

limited circumstances to specify a particular “brand” or “equal” as their product of choice.²⁶ Brand name or equal specifications are used in conjunction with a sourcing method, including but not limited to a sole source procurement, to narrowly define the solicitation product specifications. Agencies may use brand name or equal specifications when the brand named describes the standard of quality, performance, functionality and other characteristics of the product needed by the Agency.

The Agency is entitled to determine what constitutes a product that is equal or superior to the product specified, and any such determination is final. A brand name Specification may be prepared and used only if the Agency makes one or more of the following written determinations:

- The use is not likely to encourage favoritism in the awarding of public contracts or substantially diminish competition;
- The use would result in substantial cost savings to the agency;
- There is only one manufacturer or seller of the product of the quality, performance or functionality required; or
- The efficient utilization of existing Goods requires the acquisition of compatible goods or services.

For example, a brand name specification may be prepared and used in the case of a single manufacturer with multiple resellers. Whether an agency seeks the classic sole source or seeks to brand its planned procurement by a particular named product via a brand name or equal specification, the agency must satisfy applicable public notice requirements.

F. EMERGENCY PROCUREMENTS (ORS 279B.080)

A contracting agency’s director has the authority to declare an emergency in writing. In a declared emergency, the agency may make purchases outside the normal competitive procurement process. However, the agency must make these purchases with competition that is “reasonable and appropriate” under the circumstances. The written emergency declaration must include findings about:

- The nature of the emergency; and
- The methods used for selecting suppliers.

DAS Rules also require the written emergency declaration to include:

- The anticipated harm if not redressed through expedited procurements; and
- Whether competition is practical.

The Model Rules further require that the procurement be made with competition that is practicable under the circumstances.

²⁶ ORS 279.215 (*Brand name or equal specification; brand name specification*)

G. SPECIAL PROCUREMENTS (ORS 279B.085)

In limited circumstances, an agency may acquire goods and services through a “special procurement” without having to satisfy all of the normal requirements associated with competitive sealed bid and sealed proposal solicitations. Agencies may execute a single contract or a series of contracts over time through this exception.²⁷ An agency’s written request for a special procurement must be submitted to DAS SPO, the local contract review board, the office of the State Treasurer or the office of the Secretary of State, as applicable, describing the proposed contracting procedure, the goods or services or the class of goods or services to be acquired and a factual justification that supports the following findings regarding the requested process:

- It will yield substantial cost savings **or** promote the public’s interest in ways that the normal competitive process cannot; and
- It is not likely to encourage favoritism in the awarding of public contracts **or** to substantially diminish competition.

Public notice requirements may apply to the special procurement process.

4. Contract or Project Valuation

The procurement policy of the State focuses on the ethical pursuit of Best Value procurements as defined in the Code, by rule and in this Report. Value assessments should be based upon agency determinations of the Total Cost of Ownership (“TCO”) for a particular product or service. The Report’s definition for TCO is consistent with the manner in which the concept is addressed by the Code and in applicable rules.

In determining dollar thresholds for purposes of making “buy” decisions, selecting appropriate procurement sourcing methods, and satisfying requirements concerning approvals from DOJ, DAS EISPD and DAS SPO; agencies should comply with the following principles:

- Apply a TCO assessment to the planned project or planned buy;
- Consider the value that will aggregate over the planned life cycle of the project or contract; and
- Do not fragment or artificially segregate²⁸ a single project or transaction into several for the convenience of avoiding a statutory or administrative requirement.

The subject assessments must be reasonable under all attendant circumstances that the agency knows or should know.

²⁷ “Contract Specific” and “Class” special procurements, respectively.

²⁸ Legitimate phased developments with the potential for optional future work should not run afoul of this principle; but the agency must value the planned project for the full scope of work – actual and anticipated.

Conclusion

State agencies have established review processes that govern the introduction and use of Software in their environments. These processes are primarily the result of the State's experience in acquiring and using Closed-source Software. The State acknowledges that Open-Source Software represents viable solutions to the business problems faced by state agencies. State agencies in Oregon are using Open-Source Software for diverse purposes. OSS has randomly crept into our environments through, among other means, free downloads from the Internet and via bundling in acquired proprietary and other commercial Software.

There are no consistent practices around acquisition and accountability for our OSS. Agencies may be following disparate courses of action, some unrelated to their established Software review processes, in acquiring and using their OSS. It is well understood that the acquisition and use of OSS solutions may come with attendant risks that must be identified and managed in each instance to optimize the utility of the acquired Software.

The State has benefited from the use of its acquired OSS, but may be unnecessarily exposed to risk attendant to this use. An enterprise Software acquisition policy that informs users and guides them in implementation of best practice risk management measures for all Software acquisition and use, including OSS, can mitigate the risk.

This Report closes with the following findings and recommendations that will hopefully contribute towards development and implementation of such a policy.

Findings

1. OSS development and distribution provide viable information systems solutions.
2. OSS is maturing in its diversity of offerings and technical functionality, and has a growing impact and increasingly noticeable effect on the Software industry.
3. Open-Source solutions increasingly compete with a broad range of Closed-Source products in all markets.
4. OSS is valuable Intellectual Property, and is increasingly a critical component of information enterprise strategies and infrastructures in local, state, national and global venues – including the State of Oregon.
5. A recent inventory of selected state agencies reveals thousands of instances of OSS installed and operating in the affected agency information systems. There is no consistent documentation tracking the licensing obligations attendant to the acquisition and use of this OSS.

6. The State has not established enterprise policies concerning the acquisition, distribution, use and licensing of OSS.
7. The acquisition of OSS is a procurement event.
8. The State does have established, written laws, administrative rules and policies guiding agency Best Value procurement activities; which apply to the acquisition, distribution, use and licensing of OSS.
9. The State is probably not consistently acquiring OSS through Best Value procurement activities.
10. The inherent value in OSS acquisition and use must be balanced against the attendant risks.
11. OSS must be consistently acquired and used in accordance with applicable law, regulation and established policy to mitigate risk.
12. Development and implementation of formal acquisition and use policies for OSS will maximize the utility of OSS use in all respects, including without limitation:
 - Functionality;
 - Integration;
 - Interoperability;
 - Management of acquisitions through a common efficient process;
 - Efficient management of acquired assets;
 - Ensuring license compliance; and
 - Ensuring compliance with governmental enterprise business objectives and public procurement law.

Recommendations

1. The State should acquire and use OSS as appropriate for specific project and enterprise business objectives.
2. The State should acquire and use Software, regardless of its source, only in compliance with applicable law, regulation and established policy that direct Total Cost of Ownership assessments and Best Value procurements.
3. The State should work towards development of a formal enterprise policy concerning acquisition, distribution, use and licensing of Software in general, including OSS.
4. Policy development should progress through three (3) phases:
 - Assessment,

- Development, and
 - Implementation.
5. The assessment phase next steps should include:
 - Expansion of the current OSS Inventory to identify all Software applications operating in all agencies;
 - Documentation of all licensing obligations attendant to the inventoried Software; and
 - Identification of all current agency policies and practices concerning acquisition and use of Software in general.
 6. The State should promulgate the subject policy through formal rulemaking.
 7. Subject to the discretion of the DAS Enterprise Information Strategy and Policy Division, the current OS Community of Practice should evolve into a rulemaking advisory committee.

APPENDIX A: List of Gartner Research Articles on Open-Source

Di Maio, Andrea (2004). ***Look Beyond TCO to Judge Open-Source Software in Government.*** Gartner Research. Stamford, CT. December 6, 2004. G00123983.

Di Maio, Andrea (2005). ***Governments Move Toward Sounder Policies for Open-Source Software.*** Gartner Research. Stamford, CT. April 11, 2005. G00126505.

Driver, Mark and Weiss, George J. (2005). ***Predicts 2006: The Effects of Open-Source Software on the IT Software Industry.*** Stamford, CT. November 28, 2005. G00136381.

Di Maio, Andrea (2006). ***How Commercial Software Vendors Should Cope With Government Open-Source Policies.*** Gartner Research. Stamford, CT. March 27, 2006. G00138113.

Di Maio, Andrea (2006). ***Case Study: Malaysia Shows What Being Strategic on Open Source Means.*** Gartner Research. Stamford, CT. May 10, 2006. G00139355.

Di Maio, Andrea (2006). ***Explaining the Public Value of Open Source.*** Gartner Research. Stamford, CT. July 31, 2006. G00142077.

Di Maio, Andrea (2006). ***Open-Source Software in Government: The Tide is Rising.*** Gartner Research. Stamford, CT. August 2, 2006. G00142209.

Driver, Mark (2006). ***Learn the Basic Principles of Open-Source Software.*** Gartner Research. Stamford, CT. November 16, 2006. G00144771.

Driver, Mark (2006). ***Managing Open-Source Service and Support.*** Gartner Research. Stamford, CT. December 12, 2006. G00144473.

Driver, Mark (2006). ***Establish an Enterprise Open-Source Policy to Maximize Value and Minimize Risk.*** Gartner Research. Stamford, CT. December 13, 2006. G00144406.

Prentice, Brian (2007). ***Commercial Open Source: Is All That Glitters Usually Sold?*** Gartner Research. Stamford, CT. January 11, 2007. G00144120.

Di Maio, Andrea (2007). ***When to Use Custom, Proprietary, Open-Source or Community-Source Software.*** Gartner Research. Stamford, CT. February 16, 2007. G00146202.

Silver, Michael A. (2007). **Key Issues in Client Operating System and Productivity Software**. Gartner Research. Stamford, CT. April 3, 2007. G00147144.

Di Maio, Andrea (2007). **Public-Sector Open-Source Survey, Worldwide: Getting There**. Gartner Research. Stamford, CT. April 13, 2007. G00147639.

Norton, David (2007). **Open-Source Modeling Tools Maturing, but Need Time to Reach Full Potential**. Gartner Research. Stamford, CT. April 20, 2007. G00146580.

Driver, Mark (2007). **Key Issues for Open-Source Software in 2007**. Gartner Research. Stamford, CT. May 7, 2007. G00146168.

Driver, Mark (2007). **Criteria for Evaluating a Vendor's Open-Source Software Strategy**. Gartner Research. Stamford, CT. May 10, 2007. G00148517.

Prentice, Brian (2007). **Key Issues for the Evolving Intellectual Property Landscape, 2007**. Gartner Research. Stamford, CT. June 19, 2007. G00149099.

Di Maio, Andrea (2007). **Open-Source Software Grows in the Public Sector**. Gartner Research. Stamford, CT. June 29, 2007. G00149692.

Gartner Research Team. (2007). **Hype Cycle for Open-Source Software, 2007**. Gartner Research. Stamford, CT. July 11, 2007. G00148920.

Weiss, George J. (2007). **Microsoft's Open-Source Initiatives Finally Resonate**. Gartner Research. Stamford, CT. August 1, 2007. G00150731.

Driver, Mark (2007). **Microsoft Reaches Toward a More Consistent OSS Strategy**. Gartner Research. Stamford, CT. August 1, 2007. G00150733.

Gilbert, Mark R., Latham, Lou and Shegda, Karen M. (2007). **Decision Framework: Use These Criteria to Determine Whether Open Source Should Be a Part of Your ECM Strategy**. Gartner Research. Stamford, CT. December 14, 2007. G00154005.

Bitterer, Andreas and Feinberg, Donald (2008). **Open-Source Business Intelligence: State of the Market**. Stamford, CT. January 10, 2008. G00129580.

Weiss, George J. (2008). **Timely 2007 Data Center Conference Poll Results on Linux**. Gartner Research. Stamford, CT. January 16, 2008. G00154398.

Weiss, George J. (2008). ***Open-Source Software in the Server Open Source Market, 2008: The State of Linux***. Gartner Research. Stamford, CT. March 3, 2008. G00155237.

Kenney, L. Frank and Plummer, Daryl C. (2008). ***Open Source in SOA Registry / Repository Technologies, 2008***. Gartner Research. Stamford, CT. March 5, 2008. G00154979.

Desisto, Robert P. (2008). ***Open Source in SaaS, 2008***. Gartner Research. Stamford, CT. March 6, 2008. G00155283.

Elliot, Bern and Johnson, Geoff. (2008). ***How to Navigate the World of Open-Source Communication Software***. Gartner Research. Stamford, CT. March 6, 2008. G00155287.

Silver, Michael A. (2008). ***Open Source on the Desktop, 2008***. Gartner Research. Stamford, CT. March 7, 2008. G00154915.

Johnson, Geoff. (2008). ***Open Source in the Communication Industry, 2008***. Gartner Research. Stamford, CT. March 7, 2008. G00155199.

APPENDIX B: List of Diverse Articles on Open-Source

Koch, Christopher (2006). *Free Code For Sale*. CIO Magazine, February 16, 2006.

Cope, Rod and Peters, Stormy (2006). *Integrating OSS into Your Environment*. Linux World Magazine, February 2006.

Dortch, Michael (2006). *Best Practices for Open Source in the Enterprise*. Robert Frances Group Research. Westport, CT. October 2006.

Navy to focus only on open systems

<http://www.fcw.com/online/news/151858-1.html>

A senior official says the service can no longer afford to buy proprietary systems. The Navy will acquire only systems based on open technologies and standards.

Open source gains business credibility

http://news.zdnet.com/2424-9595_22-190058.html?tag=nl.e019

Three-quarters of silicon.com's 12-strong CIO Jury IT user panel said they are using more open source technology in all parts of their infrastructure ranging from small-scale systems to desktops and mission critical applications.

Gartner: Open Source in 80 Percent of Software by 2012

Posted by Lora Bentley on February 4, 2008 at 1:23 pm

<http://www.itbusinessedge.com/blogs/osb/?p=310>

A new Gartner report says open source technology will be in 80 percent of commercial software offerings within four years.

HP Launches Open Source Governance Initiative

Most organizations don't know how many open source products they are using, and the character of the licenses attached to them.

<http://nl.internet.com/ct.html?rtr=on&s=1,3qqt,1,kp6o,ab2f,e8s0,hvmd>

Is Open Source A Threat To Businesses, Legally?

<http://ct.techrepublic.com.com/clicks?t=41811079-e1ad0c39348c840884ba669410e06701-bf&brand=TECHREPUBLIC&s=5>

When it comes to intellectual property, McAfee warns that open source may be more of a threat to businesses.

The Hidden Costs of Linux Ownership

Does "Linux" cleverly hide levels of complexity that would baffle M. C. Escher?

<http://nl.internet.com/ct.html?rtr=on&s=1,3pmb,1,blj3,1bzo,e8s0,hvmd>

Survey: Two Thirds of Enterprises Entertain Open-Source Solutions

http://www.cio.com/article/166056?source=nl_t_ciodevarch

While two thirds of enterprise companies have some degree of interest in open-source, far fewer indicate its adoption is a high priority, according to a Forrester survey of 2,252 software decision-makers.

Open Source Usage Equals Monetary and Environmental Gains

In October 2004, a U.K. government-sponsored study concluded that substantial long-term monetary and environmental gains were accrued from using computers running the Linux operating system.

<http://ct.techrepublic.com.com/clicks?t=41480715-e1ad0c39348c840884ba669410e06701-bf&s=5&fs=0>

Calculating TCO and ROI on Open Source Platforms

Determining the total cost of ownership/operation and return on investment for open source systems can be an elusive proposition. See what factors--both concrete and abstract--you need to take into account.

<http://ct.techrepublic.com.com/clicks?t=41283327-e1ad0c39348c840884ba669410e06701-bf&s=5&fs=0>

APPENDIX C: List of Diverse Reference Books on Open-Source

Hahn, Robert William. ***Government Policy Toward Open Source Software***. Washington D.C.: Brookings Institution Press, 2002.

Golden, Bernard. ***Succeeding with Open Source***. Boston, MA: Addison-Wesley, 2004.

St. Laurent, Andrew M. ***Understanding Open Source and Free Software Licensing***. Sebastopol, CA: O'Reilly Media, Inc., 2004.

Rosen, Lawrence. ***Open Source Licensing: Software Freedom and Intellectual Property Law***. Indianapolis, IN: Prentice Hall PTR, 2005.

Woods, Dan and Guliani, Guatam. ***Open Source for the Enterprise: Managing Risks, Reaping Rewards***. Sebastopol, CA: O'Reilly Media, Inc., 2005.

Muffatto, Moreno. ***Open Source: A Multidisciplinary Approach***. London, UK: Imperial College Press, 2006.

APPENDIX D: List of Internet Addresses for Diverse Open-Source Resources²⁹

Black Duck Software

<http://www.blackducksoftware.com/>

Commonwealth of Massachusetts, Division of Information Technology

<http://www.mass.gov/?pageID=itdhomepage&L=1&L0=Home&sid=Aitd>

Free Software Foundation (FSF)

<http://www.fsf.org/>

Government Open Code Collaborative (GOCC)

<http://www.gocc.gov/>

Government-to-Government AppExchange

(A peer-to-peer community where public-sector organizations can share on-demand software)

<http://www.salesforce.com/appexchange>

Linux Foundation

https://www.linux-foundation.org/en/Main_Page

NAVICA

<http://www.navicasoft.com/>

Open Logic Software

<http://www.openlogic.com/index.php>

Open Source Initiative (OSI)

<http://opensource.org/>

Open Source Risk Management

<http://www.osriskmanagement.com/index.html>

²⁹ Inclusion of any commercial Websites in this Appendix does not constitute the State of Oregon's endorsement for any of the offered products and services. These Websites reveal Open-Source reference information and concepts that readers may find helpful.

Open Technology Business Center

<http://www.opentechcenter.com/drupal/index.php>

Oregon State University Open Source Laboratory (OSU-OSL)

<http://osuosl.org/>

Real Time Linux Foundation, Inc.

<http://www.realtimelinuxfoundation.org/>

Software Association of Oregon

<http://www.sao.org/>

Software Freedom Law Center (SFC)

<http://www.Softwarefreedom.org/>

Wikipedia, the Free Encyclopedia Main Page

(Input any OS-related terms into the search engine for high-level information and citations to other sources)

http://en.wikipedia.org/wiki/Main_Page

Wikipedia, the Free Encyclopedia Entry for “Open Source”

http://en.wikipedia.org/wiki/Open_source

APPENDIX E: List of OSS Licenses Certified by the Open Source Initiative

(Available Online at <http://www.opensource.org/licenses/category> with links to detailed information regarding each license type)

Licenses that are popular and widely used or with strong communities(9)

Apache License, 2.0
New BSD license
GNU General Public License (GPL)
GNU Library or "Lesser" General Public License (LGPL)
MIT license
Mozilla Public License 1.1 (MPL)
Common Development and Distribution License
Common Public License 1.0
Eclipse Public License

Special purpose licenses (3)

Educational Community License
NASA Open Source Agreement 1.3
Open Group Test Suite License

Other/Miscellaneous licenses (5)

Adaptive Public License
Artistic license
Artistic license 2.0
Open Software License
Qt Public License (QPL)
zlib/libpng license

Licenses that are redundant with more popular licenses (9)

Academic Free License
Attribution Assurance Licenses
Eiffel Forum License V2.0
Fair License
Historical Permission Notice and Disclaimer
Lucent Public License Version 1.02
University of Illinois/NCSA Open Source License
X.Net License

Non-reusable licenses (24)

Apple Public Source License
Computer Associates Trusted Open Source License 1.1 *CUA Office Public License Version 1.0
EU DataGrid Software License
Entessa Public License
Framework License
IBM Public License
Motosoto License
Naumen Public License
Nethack General Public License
Nokia Open Source License
OCLC Research Public License 2.0
PHP License
Python license (CNRI Python License)
Python Software Foundation License
RealNetworks Public Source License V1.0
Reciprocal Public License
Ricoh Source Code Public License
Sleepycat License
Sun Public License
Sybase Open Watcom Public License 1.0
Vovida Software License v. 1.0
W3C License
wxWindows Library License
Zope Public License

Superseded licenses (4)

Apache Software License
Eiffel Forum License
Lucent Public License (Plan9)
Mozilla Public License 1.0 (MPL)

Licenses that have been voluntarily retired (4)

Intel Open Source License
Jabber Open Source License
MITRE Collaborative Virtual Workspace License (CVW License)
Sun Industry Standards Source License (SISSL)

APPENDIX F: List of Selected FSF Responses to FAQ Concerning the GNU Licenses³⁰

(Full FAQ list is accessible Online at:

<http://www.fsf.org/licensing/licenses/gpl-faq.html>)

Who has the power to enforce the GPL?

Since the GPL is a copyright license, the copyright holders of the Software are the ones who have the power to enforce the GPL. If you see a violation of the GPL, you should inform the developers of the GPL-covered Software involved. They either are the copyright holders, or are connected with the copyright holders.

Why does the GPL permit users to publish their modified versions?

A crucial aspect of free Software is that users are free to cooperate. It is absolutely essential to permit users who wish to help each other to share their bug fixes and improvements with other users. Some have proposed alternatives to the GPL that require modified versions to go through the original author. As long as the original author keeps up with the need for maintenance, this may work well in practice, but if the author stops (more or less) to do something else or does not attend to all the users' needs, this scheme falls down. Aside from the practical problems, this scheme does not allow users to help each other. Sometimes control over modified versions is proposed as a means of preventing confusion between various versions made by users. In our experience, this confusion is not a major problem. Many versions of Emacs have been made outside the GNU Project, but users can tell them apart. The GPL requires the maker of a version to place his or her name on it, to distinguish it from other versions and to protect the reputations of other maintainers.

Does the GPL require that source code of modified versions be posted to the public?

The GPL does not require you to release your modified version, or any part of it. You are free to make modifications and use them privately, without ever releasing them. This applies to organizations (including companies), too; an

³⁰ This Appendix F only lists selected FSF responses to FAQ concerning GNU Licenses.” The full list of FAQ responses is divided into the following categories: (i) Basic Questions About the GNU Project, the Free Software Foundation, and Its Licenses; (ii) General Understanding of the GNU Licenses; (iii) Using GNU Licenses for Your Programs; (iv) Distribution of Programs Released Under the GNU Licenses; (v) Using Programs Released Under the GNU Licenses When Writing Other Programs; (vi) Combining Work With Code Released Under the GNU Licenses; and (vii) Questions About Violations of the GNU Licenses.

organization can make a modified version and use it internally without ever releasing it outside the organization. But *if* you release the modified version to the public in some way, the GPL requires you to make the modified source code available to the program's users, under the GPL. Thus, the GPL gives permission to release the modified program in certain ways, and not in other ways; but the decision of whether to release it is up to you.

Can I have a GPL-covered program and an unrelated non-free program on the same computer?

Yes.

If I know someone has a copy of a GPL-covered program, can I demand he give me a copy?

No. The GPL gives him permission to make and redistribute copies of the program *if he chooses to do so*. He also has the right not to redistribute the program, if that is what he chooses.

What does “written offer valid for any third party” mean in GPLv2? Does that mean everyone in the world can get the source to any GPL program no matter what?

If you choose to provide source through a written offer, then anybody who requests the source from you is entitled to receive it. If you commercially distribute binaries not accompanied with source code, the GPL says you must provide a written offer to distribute the source code later. When users non-commercially redistribute the binaries they received from you, they must pass along a copy of this written offer. This means that people who did not get the binaries directly from you can still receive copies of the source code, along with the written offer. The reason we require the offer to be valid for any third party is so that people who receive the binaries indirectly in that way can order the source code from you.

GPLv2 says that modified versions, if released, must be “licensed ... to all third parties.” Who are these third parties?

Section 2 says that modified versions you distribute must be licensed to all third parties under the GPL. “All third parties” means absolutely everyone—but this does not require you to **do** anything physically for them. It only means they have a license from you, under the GPL, for your version.

If a program combines public-domain code with GPL-covered code, can I take the public-domain part and use it as public domain code?

You can do that, if you can figure out which part is the public domain part and separate it from the rest. If code was put in the public domain by its developer, it is in the public domain.

Does the GPL allow me to distribute copies under a nondisclosure agreement?

No. The GPL says that anyone who receives a copy from you has the right to redistribute copies, modified or not. You are not allowed to distribute the work on any more restrictive basis. If someone asks you to sign an NDA for receiving GPL-covered Software copyrighted by the FSF, please inform us immediately by writing to license-violation@fsf.org. If the violation involves GPL-covered code that has some other copyright holder, please inform that copyright holder, just as you would for any other kind of violation of the GPL.

What does it mean to say that two licenses are “compatible”?

In order to combine two programs (or substantial parts of them) into a larger work, you need to have permission to use both programs in this way. If the two programs' licenses permit this, they are compatible. If there is no way to satisfy both licenses at once, they are incompatible. For some licenses, the way in which the combination is made may affect whether they are compatible—for instance, they may allow linking two modules together, but not allow merging their code into one module. If you just want to install two separate programs in the same system, it is not necessary that their licenses be compatible, because this does not combine them into a larger work.

What does it mean to say a license is “compatible with the GPL?”

It means that the other license and the GNU GPL are compatible; you can combine code released under the other license with code released under the GNU GPL in one larger program. All GNU GPL versions permit such combinations privately; they also permit distribution of such combinations provided the combination is released under the same GNU GPL version. The other license is compatible with the GPL if it permits this too. GPLv3 is compatible with more licenses than GPLv2: it allows you to make combinations with code that has specific kinds of additional requirements that are not in GPLv3

itself. Section 7 has more information about this, including the list of additional requirements that are permitted.

Can the developer of a program who distributed it under the GPL later license it to another party for exclusive use?

No, because the public already has the right to use the program under the GPL, and this right cannot be withdrawn.

Do I have “fair use” rights in using the source code of a GPL-covered program?

Yes, you do. “Fair use” is use that is allowed without any special permission. Since you don't need the developers' permission for such use, you can do it regardless of what the developers said about it—in the license or elsewhere, whether that license be the GNU GPL or any other free Software license. Note, however, that there is no world-wide principle of fair use; what kinds of use are considered “fair” varies from country to country.

Can the US Government release a program under the GNU GPL?

If the program is written by US federal government employees in the course of their employment, it is in the public domain, which means it is not copyrighted. Since the GNU GPL is based on copyright, such a program cannot be released under the GNU GPL. (It can still be [free Software](#), however; a public domain program is free.) However, when a US federal government agency uses contractors to develop Software, that is a different situation. The contract can require the contractor to release it under the GNU GPL. (GNU Ada was developed in this way.) Or the contract can assign the copyright to the government agency, which can then release the Software under the GNU GPL.

Can the US Government release improvements to a GPL-covered program?

Yes. If the improvements are written by US government employees in the course of their employment, then the improvements are in the public domain. However, the improved version, as a whole, is still covered by the GNU GPL. There is no problem in this situation. If the US government uses contractors to do the job, then the improvements themselves can be GPL-covered.

How can I allow linking of proprietary modules with my GPL-covered library under a controlled interface only?

Add this text to the license notice of each file in the package, at the end of the text that says the file is distributed under the GNU GPL:

Linking ABC statically or dynamically with other modules is making a combined work based on ABC. Thus, the terms and conditions of the GNU General Public License cover the whole combination. In addition, as a special exception, the copyright holders of ABC give you permission to combine ABC program with free Software programs or libraries that are released under the GNU LGPL and with independent modules that communicate with ABC solely through the ABCDEF interface. You may copy and distribute such a system following the terms of the GNU GPL for ABC and the licenses of the other code concerned, provided that you include the source code of that other code when and as the GNU GPL requires distribution of source code. Note that people who make modified versions of ABC are not obligated to grant this special exception for their modified versions; it is their choice whether to do so. The GNU General Public License gives permission to release a modified version without this exception; this exception also makes it possible to release a modified version which carries forward this exception.

Only the copyright holders for the program can legally authorize this exception. If you wrote the whole program yourself, then assuming your employer or school does not claim the copyright, you are the copyright holder—so you can authorize the exception. But if you want to use parts of other GPL-covered programs by other authors in your code, you cannot authorize the exception for them. You have to get the approval of the copyright holders of those programs.

What is the difference between an “aggregate” and other kinds of “modified versions”?

An “aggregate” consists of a number of separate programs, distributed together on the same CD-ROM or other media. The GPL permits you to create and distribute an aggregate, even when the licenses of the other Software are non-free or GPL-incompatible. The only condition is that you cannot release the aggregate under a license that prohibits users from exercising rights that the each program's individual license would grant them. Where's the line between two separate programs, and one program with two parts? This is a legal question, which ultimately judges will decide. We believe that a proper criterion depends both on the mechanism of communication (exec, pipes, rpc, function calls within a shared address space, etc.) and the semantics of the communication (what kinds of information are interchanged). If the modules are

included in the same executable file, they are definitely combined in one program. If modules are designed to run linked together in a shared address space, that almost surely means combining them into one program. By contrast, pipes, sockets and command-line arguments are communication mechanisms normally used between two separate programs. So when they are used for communication, the modules normally are separate programs. But if the semantics of the communication are intimate enough, exchanging complex internal data structures, that too could be a basis to consider the two parts as combined into a larger program.

I'd like to incorporate GPL-covered Software in my proprietary system. Can I do this?

You cannot incorporate GPL-covered Software in a proprietary system. The goal of the GPL is to grant everyone the freedom to copy, redistribute, understand, and modify a program. If you could incorporate GPL-covered Software into a non-free system, it would have the effect of making the GPL-covered Software non-free too. A system incorporating a GPL-covered program is an extended version of that program. The GPL says that any extended version of the program must be released under the GPL if it is released at all. This is for two reasons: to make sure that users who get the Software get the freedom they should have, and to encourage people to give back improvements that they make. However, in many cases you can distribute the GPL-covered Software alongside your proprietary system. To do this validly, you must make sure that the free and non-free programs communicate at arms length, that they are not combined in a way that would make them effectively a single program. The difference between this and “incorporating” the GPL-covered Software is partly a matter of substance and partly form. The substantive part is this: if the two programs are combined so that they become effectively two parts of one program, then you can't treat them as two separate programs. So the GPL has to cover the whole thing. If the two programs remain well separated, like the compiler and the kernel, or like an editor and a shell, then you can treat them as two separate programs—but you have to do it properly. The issue is simply one of form: how you describe what you are doing. Why do we care about this? Because we want to make sure the users clearly understand the free status of the GPL-covered Software in the collection. If people were to distribute GPL-covered Software calling it “part of” a system that users know is partly proprietary, users might be uncertain of their rights regarding the GPL-covered Software. But if they know that what they have received is a free program plus another program, side by side, their rights will be clear.

APPENDIX G: CIO Council Open-Source CoP OSS Inventory PowerPoint Presentation

The referenced PowerPoint Presentation discloses the results of the preliminary Open-Source Software Inventory Project sponsored by the CIO Council. The reflected data does not reveal the full extent of Open-Source use in state agencies. Only a portion of state agencies participated in the inventory, and the inventory focused on a short list of OSS products in the following categories:

- Enterprise Applications
- Collaboration
- Content Management
- Presentation
- Search
- Process Management
- Development Tools
- Integration Services
- Enterprise Service Bus
- Application Services
- Directory Services
- RDBMS
- Security
- Operating System
- Virtualization

The compiled data reveals only the number of installation “instances” in participating agency environments for each listed product. An identified product may not have been used or is no longer in use. Moreover, the inventory did not identify the origins of product acquisitions or the nature of Software Licenses attached to products. The data does reflect, in a general way, which agencies are utilizing OSS Software and a small sampling of the products used. A more comprehensive inventory will be conducted in the future as part of the State’s development of policy around Open-Source Software acquisition and use.

The presentation is not attached, but is available under separate cover.³¹

³¹ The document is available online at:
http://www.das.state.or.us/DAS/EISPD/ITIP/Comm_of_Practice_OSS.shtml#OS_CoP_Deliverables

APPENDIX H: CIO Council Open-Source CoP Desk Top PC Evaluation Deliverables

The following documents comprise the deliverables from the Open-Source CoP Desk Top PC Evaluation Initiative³²:

1. Conceptual Framework
2. Methodology
3. Vendor Selection Matrix
4. Open-Source Desk Top Traceability Matrix
5. Testing Results 20070131

These documents are referenced in this Appendix H, but are not attached. They will become available under separate cover in the near future pending completion of continuing internal review.³³

³² These are concept documents only, and do not represent the positions and opinions of the State of Oregon regarding particular Software applications. The documents depict a reasoned, pragmatic approach that agencies should consider applying to Software application comparisons.

³³ When released Online, the document will be available at http://www.das.state.or.us/DAS/EISPD/ITIP/Comm_of_Practice_OSS.shtml#OS_CoP_Deliverables

APPENDIX I: DOJ Model Public Contracting Rules Applicable to Software Acquisition³⁴

DIVISION 46 – Model Rules: General Provisions Related to Public Contracting

137-046-0100 Content and General Application; Federal Law Supremacy

137-046-0110 Definitions for the Model Rules

137-046-0120 Policy

137-046-0130 Application of the Code and Model Rules; Exceptions

Minorities, Women and Emerging Small Businesses

137-046-0200 Notice to Advocate for Minorities, Women and Emerging Small Businesses

137-046-0210 Subcontracting to and Contracting with Emerging Small Businesses; DBE Disqualification

Contract Preferences

137-046-0300 Preference for Oregon Goods and Services

137-046-0310 Reciprocal Preferences

137-046-0320 Preference for Recycled Materials

Cooperative Procurement

137-046-0400 Authority for Cooperative Procurements

137-046-0410 Responsibilities of Administering Contracting Agencies and Purchasing Contracting Agencies

137-046-0420 Joint Cooperative Procurements

³⁴ This Appendix is a “table of contents” for the Model Rules. The Report does not restate the actual text of the listed rules. Readers should access the Secretary of State Archives Division Website to access the current text of the listed rules. The Website provides search engines based on Agency names, OAR chapter numbers, and rule text. <http://arcweb.sos.state.or.us/banners/rules.htm>

137-046-0430 Permissive Cooperative Procurements

137-046-0440 Advertisements of Intent to Establish Contracts through a Permissive Cooperative Procurement

137-046-0450 Interstate Cooperative Procurements

137-046-0460 Advertisements of Interstate Cooperative Procurements

137-046-0470 Protests and Disputes

137-046-0480 Contract Amendments

Repealed Rules

137-046-0500 Repealed Rules

DIVISION 47 – Model Rules: Public Procurements for Goods or Services

General Provisions

137-047-0000 Application

137-047-0100 Definitions

Source Selection

137-047-0250 Methods of Source Selection

137-047-0255 Competitive Sealed Bidding

137-047-0257 Multistep Sealed Bidding

137-047-0260 Competitive Sealed Proposals

137-047-0261 Procedures for Competitive Range, Multi-tiered and Multistep Proposals

137-047-0262 Competitive Range, Discussions and Negotiations

137-047-0263 Multistep Sealed Proposals

137-047-0265 Small Procurements

137-047-0270 Intermediate Procurements

137-047-0275 Sole-source Procurements

137-047-0280 Emergency Procurements

137-047-0285 Special Procurements

137-047-0290 Cooperative Procurements

Procurement Process

137-047-0300 Public Notice of Solicitation Documents

137-047-0310 Bids or Proposals are Offers

137-047-0320 Facsimile Bids and Proposals

137-047-0330 Electronic Procurement

Bid and Proposal Preparation

137-047-0400 Offer Preparation

137-047-0410 Offer Submission

137-047-0420 Pre-Offer Conferences

137-047-0430 Addenda to Solicitation Document

137-047-0440 Pre-Closing Modification or Withdrawal of Offers

137-047-0450 Receipt, Opening, and Recording of Offers; Confidentiality of Offers.

137-047-0460 Late Offers, Late Withdrawals and Late Modifications

137-047-0470 Mistakes

137-047-0480 Time for Agency Acceptance

137-047-0490 Extension of Time for Acceptance of Offer

Qualifications and Duties

137-047-0500 Responsibility of Bidders and Proposers

137-047-0525 Qualified Products Lists

137-047-0550 Prequalification of Prospective Offerors

137-047-0575 Debarment of Prospective Offerors

Offer Evaluation and Award

137-047-0600 Offer Evaluation and Award

137-047-0610 Notice of Intent to Award

137-047-0620 Documentation of Award

137-047-0630 Availability of Award Decisions

137-047-0640 Rejection of an Offer

137-047-0650 Rejection of All Offers

137-047-0660 Cancellation of Procurement or Solicitation

137-047-0670 Disposition of Offers if Procurement or Solicitation Canceled

Legal Remedies

137-047-0700 Protests and Judicial Review of Special Procurements

137-047-0710 Protests and Judicial Review of Sole-Source Procurements

137-047-0720 Protests and Judicial Review of Multi-Tiered and Multistep Solicitations

137-047-0730 Protests and Judicial Review of Solicitations

137-047-0740 Protests and Judicial Review of Contract Award

137-047-0745 Protests and Judicial Review of Qualified Products List Decisions

137-047-0750 Judicial Review of Other Violations

137-047-0760 Review of Prequalification and Debarment Decisions

137-047-0800 Amendments

137-047-0810 Termination of Price Agreements

APPENDIX J: DAS Public Contracting Rules Applicable to Software Acquisition³⁵

Division 246 – General Provisions Related to Public Contracting

GENERAL PROVISIONS

125-246-0100	Application; Federal Override; Effective Date
125-246-0110	Definitions
125-246-0120	Policies
125-246-0130	Application of the Code and Rules; Exceptions

AUTHORITY

125-246-0140	Procurement Authority
125-246-0150	Applicability of these Rules to Agencies
125-246-0170	Delegation of Authority

MINORITIES, WOMEN AND EMERGING SMALL BUSINESSES

125-246-0200	Affirmative Action; Limited Competition Permitted
125-246-0210	Subcontracting to and Contracting with Emerging Small Businesses; DBE Disqualification
125-246-0220	Advocate's Office and OMWESB

CONTRACT PREFERENCES

125-246-0300	Preference for Oregon Supplies and Services; Tie-Offers
125-246-0310	Reciprocal Preferences

RECYCLING

125-246-0320	Recycling Definitions
125-246-0321	Recycling Policy
125-246-0322	Preference for Recycled Materials
125-246-0323	Recycled Paper and Paper Products
125-246-0324	Recycling: Food Service and Food Packaging

³⁵ This Appendix is a “table of contents” for the DAS Public Contracting Rules. The Report does not restate the actual text of the listed rules. Readers should access the Secretary of State Archives Division Website to access the current text of the listed rules. The Website provides search engines based on Agency names, OAR chapter numbers, and rule text. <http://arcweb.sos.state.or.us/banners/rules.htm>

STATE PROCUREMENT

125-246-0330 State Procurement

(Personal Services Contracts)

125-246-0335 Authority and Standards for Personal Services Contracts
125-246-0345 Procedures for Personal Services Contracts
125-246-0350 Approval of Personal Services Contracts
125-246-0351 Acquiring Services Before Obtaining Requisite Approvals
125-246-0352 Retroactive Approval of Public Contracts
125-246-0353 Reporting Requirements for Personal Services Contracts

(Procurement Files)

125-246-0355 Procurement Files

INTERGOVERNMENTAL RELATIONS

(Generally)

125-246-0360 Purchases through Federal Programs

COOPERATIVE PROCUREMENT

125-246-0400 Purpose, Policy, and Definitions
125-246-0410 Authority for Cooperative Procurements
125-246-0420 Responsibilities
125-246-0430 Joint Cooperative Procurements
125-246-0440 Permissive Cooperative Procurements
125-246-0450 Interstate Cooperative Procurements
125-246-0460 Protest and Disputes
125-246-0470 Amendments of Cooperative Procurements

NOTICES AND ADVERTISEMENT

125-246-0500 Oregon Procurement Information Network (ORPIN)

CONTRACT ADMINISTRATION

(Generally)

125-246-0550	General Definitions
125-246-0555	Contract Administration; General Provisions
125-246-0560	Amendments
125-246-0570	Reinstatements of Expired Contracts
125-246-0575	Retroactive Approvals of Existing Contracts
125-246-0576	Payment Authorization for Cost Overruns for Service Contracts
125-246-0580	Dispute Resolution

ETHICS IN PUBLIC CONTRACTING

125-246-0600	Policy
125-246-0605	Selection and Award of Public Contracts
125-246-0610	Appointments to Advisory Committees
125-246-0615	Nonretaliation
125-246-0620	Specifications
125-246-0625	Sole-Source
125-246-0630	Fragmentation
125-246-0635	Authorized Agency and Provider Communications

STATE SURPLUS PROPERTY

125-246-0700	State Surplus Property Definitions
125-246-0710	Eligibility of State Agencies, Political Subdivisions and Non-Profit Organizations
125-246-0720	State Surplus Property Acquisition
125-246-0730	Public Sales for Disposal of State Surplus Personal Property

SELLING SUPPLY AND SERVICES

125-246-0800	Policy; Applicability; Methods
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PENALTIES

125-246-0900	Penalties
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Division 247 – Public Procurements of Supplies and Services

GENERAL PROVISIONS

125-247-0005	Definitions
125-247-0010	Policies
125-247-0100	Applicability
125-247-0165	Practices Regarding Electronic Goods Procurements
125-247-0170	Life Cycle Costing

METHODS OF SOURCE SELECTION

125-247-0200	Methods of Source Selection
125-247-0255	Competitive Sealed Bidding; One Step Solicitations
125-247-0256	Competitive Sealed Bidding; Multistep Solicitations
125-247-0260	Competitive Sealed Proposals; One Step Solicitations
125-247-0261	Competitive Sealed Proposals; Multistep Solicitations
125-247-0265	Small Procurements
125-247-0270	Intermediate Procurements
125-247-0275	Sole-Source Procurements
125-247-0280	Emergency Procurements
125-247-0285	Special Procurements; Purpose and Application
125-247-0286	Special Procurements; Definitions
125-247-0287	Special Procurements; Request Procedures
125-247-0288	Special Procurements; by Rule
125-247-0293	Special Procurement; Interstate Agreements
125-247-0294	Special Procurement; Tribal Agreements
125-247-0295	Special Procurement; Special Counsel Authorized by the Attorney General
125-247-0296	Mandatory Use Contracts and Price Agreements

PROCUREMENT PROCESS

125-247-0300	Applicability to Methods of Source Selection
125-247-0305	Public Notice of Solicitation Documents
125-247-0310	Bids or Proposals are Offers
125-247-0320	Facsimile Bids and Proposals
125-247-0330	E-Procurement

BID AND PROPOSAL PREPARATION

125-247-0400	Offer Preparation
125-247-0410	Offer Submission
125-247-0420	Pre-Offer Conferences
125-247-0430	Addenda to Solicitation Document

125-247-0440	Pre-Closing Modification or Withdrawal of Offers
125-247-0450	Receipt, Opening, and Recording of Offers
125-247-0460	Late Offers, Late Withdrawals, and Late Modifications
125-247-0470	Mistakes
125-247-0480	Time for Agency Acceptance
125-247-0490	Extension of Time for Acceptance of Offer

QUALIFICATIONS AND DUTIES

125-247-0500	Responsibility of Offerors
125-247-0525	Qualified Products Lists
125-247-0550	Prequalification of Prospective Offerors; Request for Qualifications (RFQ)
125-247-0575	Debarment of Prospective Offerors

OFFER EVALUATION AND AWARD

125-247-0600	Offer Evaluation and Award
125-247-0610	Notice of Intent to Award
125-247-0620	Documentation of Award
125-247-0630	Availability of Award Decisions
125-247-0640	Rejection of an Offer
125-247-0650	Rejection of All Offers
125-247-0660	Cancellation of Procurement or Solicitation
125-247-0670	Disposition of Offers if Solicitation Cancelled

SPECIFICATIONS

125-247-0690	Policy
125-247-0691	Brand Name Specification

LEGAL REMEDIES

125-247-0700	Protests and Judicial Review of Approvals of Special Procurements
125-247-0710	Protests and Judicial Review of Sole Source Procurements
125-247-0720	Protests and Judicial Review of Multiple-Tiered and Multi-Step Solicitations
125-247-0730	Protests and Judicial Review of Solicitations
125-247-0731	Protests and Judicial Review of Qualified Products List Decisions
125-247-0740	Protests and Judicial Review of Contract Award
125-247-0750	Judicial Review of Other Violations
125-247-0760	Review of Prequalification and Debarment Decisions
125-247-0770	Dispute Resolution

CONTRACT AMENDMENTS

125-247-0800

Contract Amendments

APPENDIX K: IT Acquisition Policy and OSS Risk Management Analysis from the State of Massachusetts

Commonwealth of Massachusetts IT Acquisition Policy

Policy Area: Application/Application Development	Policy #: ITD-APP-02
Title: Enterprise Information Technology Acquisition Policy	Effective Date: January 13, 2004

Issue Statement

The Commonwealth has a responsibility to ensure that information technology solutions are selected based on best value after careful consideration of all possible alternatives including proprietary, public sector code sharing¹ and open source solutions. The purpose of this policy is to ensure that those solutions that may not be otherwise represented by IT vendors during the procurement process are identified and evaluated by agencies as part of their best value selection of IT solutions.

Major terms used in this policy are defined as follows:

Best Value: The Commonwealth's procurement philosophy that states that it is in the best interest of the Commonwealth for solicitation evaluation criteria to measure factors beyond cost. Please see the [Procurement Policies and Procedures Handbook](#) for a more complete definition of Best Value. For IT investments, a best value evaluation should, at a minimum, consider total cost of ownership over the entire period the IT solution is required, fit with identified business requirements, reliability, performance, scalability, security, maintenance requirements, legal risks, ease of customization, and ease of migration.

Proprietary Software: Software typically subject to a use fee under a license that limits access to and modification of the underlying source code, and restricts redistribution to others.

Open Source Software: Refers to Software whose underlying code is available for inspection and modification by the licensee, may be available for re-distribution and may be deployed without a license fee.

Public Sector Code Sharing: Software code that is owned by a public entity and is made available to other public entities for use and modification without royalties.

Applicability

Agencies within the Executive Department and vendors providing information technology goods and services to these agencies must comply with this policy.

Commonwealth's Position

- IT investments should reduce the total cost of ownership to the Commonwealth while maximizing flexibility and reuse.
- IT investments should facilitate the consolidation of platforms that provide the highest flexibility and scalability in order to achieve best value and economies of scale while meeting business requirements.

Policy Statement

- Agencies must conduct a best value evaluation for IT investments. This evaluation should consider, at a minimum, total cost of ownership over the entire period the IT solution is required, fit with identified business requirements, reliability, performance, scalability, security, maintenance requirements, legal risks, ease of customization, and ease of migration.
- For all prospective IT investments, agencies must consider as part of the best value evaluation all possible solutions, including open standards compliant open source and proprietary Software as well as open standards compliant public sector code sharing at the local, state and federal levels.

Roles and Responsibilities

Information Technology Division

- Provide guidance and consultation to agencies on solution alternatives.
- Facilitate public sector code sharing efforts.

Agencies

- Ensure compliance with this policy for all prospective IT investments by conducting a best value evaluation of all possible solutions, including open standards compliant open source, proprietary and public sector code sharing solutions.
- When considering open source alternatives and public sector code sharing consult with ITD's General Counsel regarding the rights and responsibilities conferred by the particular open source license or code-sharing agreement associated with the solution.
- Identify potential candidate code owned by the Commonwealth for sharing among public entities.

Compliance

- ITD will review all agency IT Investment Briefs, project plans and service requests for compliance with this policy before granting approvals.
- ITD will review agencies' due diligence efforts to evaluate all possible IT solution alternatives as part of its ongoing project review and oversight processes.

Related Documents

- Enterprise Open Standards Policy
- Enterprise Technical Reference Model Version 1.0
- Open Source License Legal Toolkit [to be published during the first quarter of 2004]

Points of Contact

Questions or comments related to this policy should be directed to Standards@state.ma.us. The Director of Policy and Architecture, Information Technology Division will respond to all questions.

¹ It is the Commonwealth's intent to develop a mechanism to facilitate public sector code sharing in 2004.

Nine Ways to Protect Your State from the Legal Risks Posed by the Use of Open Source Software ³⁶

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The opinions expressed in this article are those of the author alone and do not represent the position of the Romney Administration or constitute an endorsement of any of the products or services referred to herein.

EXECUTIVE SUMMARY

The legal risks posed to states by the use of open source Software must be considered in light of the risks posed by the use of proprietary Software. States that use open source Software face fewer legal risks than their private sector counterparts. The legal risks posed to states by the use of open source Software can be managed.

The specific legal risks posed by open source Software to states include:

1. Uncertainty surrounding the new terms in such licenses
2. No warranties regarding title, or indemnification against third party intellectual property infringement claims
3. No warranty regarding performance, media or malicious code
4. Automatic revocation and lack of user familiarity with terms
5. Indemnification of prior contributors

States can minimize the legal risks of using open source Software by:

1. Adopting and enforcing an open source risk management policy
2. Identifying and tracking all open source code that is used by the State
3. Having legal counsel review all licenses for new and existing open source Software and explain them to their agency clients
4. When developing a large system, have legal counsel review all licenses for open source Software that agencies propose to use and counsel the agency as to the impact of the lack of warranty and indemnification provisions
5. Requiring legal review prior to distributing code outside of the state enterprise
6. Keeping track of modifications
7. Balancing the Need for Access to the Code with the Need to Limit Source Code Access to Those Who Need It to Perform Their Jobs

³⁶ The Report includes this document as an example, not a substantive reference source. Just as its author proclaimed it as her personal opinion and disclaimed it as representing the Commonwealth's position; so does the Report disclaim that it represents the positions and opinions of the State of Oregon.

8. Considering market based models for shifting risk and
9. Documenting all Software projects

I. Introduction

Open source Software licenses, unlike most proprietary licenses, transfer the Software's source code to the licensee and enable the licensee, subject to certain restrictions, to modify and distribute it ¹. The increased use of open source Software by state governments offers many advantages. For some of state government's Software needs, open source Software provides a more cost effective and higher performing alternative to the use of proprietary Software.

The widespread use of open source Software poses some legal risks for state government. It is important not to overemphasize those risks, because the alternative, use of proprietary Software, is hardly risk-free. Worldwide, private and public sector entities that have increased their use of open source Software have determined that the benefits of using it exceed its legal risks. Moreover, some of the legal risks posed by the use of open source licenses impact states, compared to private entities, only minimally. At the same time, states should not ignore these risks, which can expose them to financial loss. The purpose of this paper is to outline the legal risks faced by states in connection with their increased use of open source Software, and identify best practices associated with the management of those risks. This paper does not address the other technology and business risks, such as reliability and security, that may be faced by state governments using open source or proprietary Software.

¹ A wide range of open source licenses is currently in use. For a practical breakdown of the rules embedded in over thirty such licenses, see the Commonwealth of Massachusetts "Open Source Legal Toolkit". Click on "Open Source Licenses Quick Reference" for a chart outlining and comparing such licenses, and "Guide to Quick Reference Chart" for an explanation of the headings

II. Proprietary Software Legal Risks

The use of any Software under a license, whether proprietary or open source, poses legal risks to the licensee. The legal risks of open source Software must be considered in light of the legal risks incurred by the users of proprietary Software.

Users of any Software, whether it is licensed under a proprietary or open source license, are at risk of violating the intellectual property rights of a third party. Proprietary Software licenses reduce, but do not eliminate, the financial risk posed to licensees by potential third party intellectual property infringement claims, through the use of warranties of title and indemnification clauses. Such provisions can provide significant protection against third party liability claims when their terms are sufficiently broad and they are issued by established, financially solid licensors.

However, warranties of title and promises of indemnification are not guarantees that the licensee will suffer no loss as a result of third party claims. Some indemnification clauses are so narrowly worded that the protection they afford licensees is minimal. In addition, due to fluctuations in the market for Software, some Software licensors will be out of business by the time indemnification is sought by a licensee. Furthermore, mere financial indemnification from the licensor cannot eliminate the cost to the licensee of

personnel time and system downtime that may occur during the pendency of litigation associated with the third party claim. Beyond indemnification for damages and attorneys fees related to third party intellectual property infringement claims, most proprietary Software licenses strictly limit the licensee's remedy, should third party infringement be determined, so that the licensee cannot recover from the Software vendor other costs that it incurs in connection with such claims.

Preexisting Software (Software not developed for the licensee) is a "good" under Article 2 of the UCC. See **USM Corp. v. Arthur D. Little Systems, Inc.**, 28 Mass. App. Court 108, 119 (1989) (turnkey system involving both hardware and Software a "good" under UCC Article 2); **Olcott International Co., Inc. v. Microdatabase**, 793 N.E. 2d 1093 (Ind. 2003) (generally available standard Software is a good under Article II of the UCC). But the warranties of merchantability and fitness provided to "buyers" of goods under the UCC are almost always explicitly and effectively disclaimed in proprietary Software licenses. While some proprietary Software licenses provide warranties regarding the Software's performance, the media on which the Software is provided, and the absence of malicious code, such warranties are almost always extremely limited in scope and duration.

Finally, a Software license is a contract between licensor and licensee, and licensees who fail to comply with proprietary license terms are always exposed to breach of contract claims.

III. Open Source Software Legal Risks

At a minimum, the following legal risks are presented by the use of open source Software:

1. Uncertainty surrounding the new terms of open source Software licenses

While the legal significance of standard proprietary Software license terms has been extensively litigated and interpreted by the courts on many occasions, there has been insufficient litigation surrounding the meaning of the new legal terms included in open source licenses to develop a "common law" of open source licensing, a judicial gloss on commonly used open source license terms. Novel terms that appear in open source licenses create risks for licensees because they have no settled legal interpretation. Among the new terms that have not been interpreted by the courts are the allegedly "viral" provisions of the GPL, under which the GPL asserts that it applies, in some circumstances, to certain Software programs that incorporate GPL code.

Significantly, the uncertainty surrounding this particular provision in the GPL is an example of a legal risk that poses far less of a problem for states than it does for private sector licensees. States, unlike their private sector counterparts, are far less likely to be in the business of commercializing code based on the GPL. While a private sector Software company may be concerned about whether an entire Software program that it develops around a kernel of GPL code is in its entirety subject to the GPL, which would limit its commercial potential, state agencies, which are not typically commercial sellers of code, will have no such concerns ¹.

¹ State institutions of higher education that commercialize Software that they have developed might, however, have the same concerns as a commercial firm.

2. No Warranties Regarding Title, or Indemnification Against Third Party Intellectual Property Infringement Claims

Unlike proprietary Software licenses, most open source Software licenses offer the licensee neither warranties regarding the licensor's title nor indemnification for third party intellectual property violations ¹. A user of open source code is therefore exposed to a higher risk of paying costs, attorney's fees and damages as a result of claims that the Software infringes third party intellectual property rights.

In ***SCO Group v. International Business Machines Group***, 2:03CV00294 DAK, (D. Utah 2003), SCO sued IBM for billions in damages, claiming that IBM, through its support and development of Linux, had breached contracts IBM entered into with SCO's predecessors in Unix ownership regarding non-disclosure of Unix code. Specifically, SCO claimed that IBM has introduced Unix code into Linux. SCO has brought related claims against two users of IBM's version of Linux in ***SCO v. AutoZone***, and ***SCO v. DaimlerChrysler***. These pending cases have received worldwide attention because they raise the specter of other putative code owners suing distributors and users of open source Software for third party intellectual property infringement.

The risks faced by a state in connection with third party intellectual property infringement claims are substantially less than the risks faced by a private party. The U.S. Supreme Court has ruled that states cannot be held liable for damages under U.S. intellectual property law.² See ***Florida Prepaid Postsecondary Education Expense Board v. College Savings Ban***, 119 S. Ct. 2199 (1999). After Florida Prepaid, states are still subject, at least in theory, to being enjoined under Federal law from using infringing code, and for money damages for patent violation based on claims brought in state court for torts like conversion of personal property, as well as claims based on "taking", reverse condemnation, or trade secret violations. However, it appears highly unlikely that a court would exercise its equitable powers, given the balance of the harms, to halt a states' use of infringing Software embedded in a mission critical system in the context of an infringement action. Any harm suffered by the putative owner of the code would appear to be dwarfed by the harm suffered by citizens temporarily unable to register for food stamps online or receive emergency information through the state's website because these systems were shut down on the grounds that they relied on infringing Software. Similarly it will be difficult for intellectual property owners to prevail against states by bringing state law claims. A state court sitting on such a claim would be hampered by its unfamiliarity with the complex intellectual property issues that have traditionally been handled in Federal court and reluctant to stretch state law to encompass third party infringement claims.

In theory, a state could waive its sovereign immunity against being sued for intellectual property infringement claims, and thus subject itself to money damages under U.S. patent, copyright and trademark law ³. State CIOs should consult their legal counsel to determine whether their state has waived its right to be sued for intellectual property infringement, and assess their risk of being subject to claims for monetary damage for infringement of third party intellectual property rights accordingly.

¹ Some open source licenses may include warranty and indemnification terms. For instance, the Mozilla Public License 1.1 permits licensees to offer downstream licensees warranties, indemnification, support and liability provisions, but only if they indemnify upstream contributors against any fallout from such commitments. See, Mozilla Public License 1.1 The GPL, the most commonly used open source license, does not permit licensees to redistribute the code with such terms. See the General Public License.

² More accurately, *Florida Prepaid* makes it practically impossible for states to be held liable for damages under U.S. intellectual property law. In *Florida Prepaid*, the court struck down the Patent and Plant Variety Remedy Clarification Act, through which Congress had attempted to abrogate the sovereign immunity of states with respect to patent infringement claims. The Court held that Congress did not have the authority to abrogate states' Eleventh Amendment immunity under the powers given the legislative branch under Article I of the Constitution. While acknowledging that Congress did have the authority to abrogate the states' sovereign immunity under the due process clause of the 14th amendment, it found that it could not do so in the case of the Act at issue because Congress had failed to find that the states had either engaged in a pattern of infringement or failed to provide victims of infringement with suitable state law remedies. Although *Florida Prepaid* dealt only with patent claims, the court's decision in a related case *College Savings Bank v. Florida Prepaid Postsecondary Board of Education Expense Board*, 527 U.S. 666 (1999), and an earlier lower court case regarding copyright infringement, *University of Houston v. Chavez*, 517 U.S. 1184 (1996), indicate that *Florida Prepaid* applies to all Federally protected intellectual property law.

³ The Massachusetts Tort Claims Act waives the Commonwealth's immunity against suit only with respect to torts. See Mass. Gen. L. ch. 258 s. 1 et seq. Thus Massachusetts has not waived its sovereign immunity with respect to liability for money damages under U.S. patent, copyright and trademark law.

3. No Warranties Regarding Performance, Media or Malicious Code

Most open source Software licenses also offer no warranties regarding the Software's performance, the media on which the code is provided, or the presence of malicious code. Most such licenses, like their proprietary counterparts, also disclaim the UCC warranties of merchantability and fitness. Thus even the minimal warranties that appear in proprietary licenses, and the financial backing of the firms that stand behind them, are not available to licensees using open source Software.

4. Automatic Revocation and Lack of User Familiarity with Terms

Proprietary Software license terms have become so standardized that information technologists are familiar with the most important rules surrounding proprietary Software use---no reverse engineering, no modification or enhancement, no distribution to non-licensees, etc. By comparison, open source licenses present new legal terms with which even experienced Software licensing lawyers, let alone their technologist clients, may not be familiar. There are a wide variety of open source licenses, each of which has its own terms. Unlike the typical proprietary End User License Agreement (EULA) in which terms are likely to be similar from one Software product to the next, there is significant variation between the terms of open source licenses; a user who is familiar with the

terms of the GPL should not assume that they are identical to those of the Apache or BSD licenses.

Failure to comply with the terms of open source licenses can result, at least in theory, in automatic revocation of the license. For instance, the GPL, like most open source licenses requires that, if the licensee distributes modifications or enhancements to the code, the GPL must be applied to those modifications and enhancements. The licensee's failure, when distributing such modifications and enhancements, to license the new code under the GPL may automatically revoke the original GPL license to use the original code. Failure to carefully read and comply with the specific open source license that accompanies open source code can expose organizations to the legal risk that their use of open source code is "off license" and therefore in violation of US intellectual property law or state trade secret law. More importantly, license violation can result in a breach of contract claim, against which no state is immune.

5. Indemnification of Prior Contributors

Some open source licenses require that, under certain circumstances, the licensee indemnify upstream contributors to the code. See n. 3, herein. States that, like the Commonwealth of Massachusetts, are constitutionally or statutorily prohibited from indemnifying parties with whom they contract must carefully monitor the circumstances under which open source code is distributed so that such indemnification provisions are not triggered.

IV. Managing the Legal Risks Posed by Open Source Software

Although the legal risks of using open source Software cannot be eliminated, they can be reduced through the adoption of the risk management policies and procedures outlined below. Measures taken to mitigate legal risk are also part of good Software asset management and serve to mitigate business risks as well. Many organizations have instituted an open source review board, an interdisciplinary group composed of business, technical and legal staff. The function of these boards is to review and approve the acquisition of open source Software by the organization as well as the dissemination of open source developed or modified by the organization. The risk management procedures listed below can be incorporated into the review process utilized by such a board.

1. Adopt an Open Source Risk Management Policy

The state's central IT organization should adopt an open source risk management policy, addressing the topics discussed in the items below. The policy should apply to all agency employees, contractors and agents. Like any other policy, the open source policy will be not as effective unless audited and enforced.

2. As part of your IT asset management program, identify and track in an accessible electronic inventory all open source code that is used by the State

Identify and track all open source code used by your state, and the licenses under which it is used, including open source code that is embedded in proprietary products. Use of

an accessible online electronic application will enhance agency compliance with this requirement and can also serve as a repository for the code and licenses, facilitating re-use and enhancement by other state entities.

An additional benefit of inventorying open source code, aside from risk management, is that agencies will have a source of information about the experience of other agencies in using particular open source programs. More importantly, possession of a complete inventory simplifies the task of updating Software to include recent bug fixes, including security patches, and new Software releases.

The inventory should also identify the source from which the agency obtained the code. The risks of obtaining code from an open source community website are, in some cases, different than the risks of obtaining code from a vendor. Finally, the inventory should document Software versions and modifications.

3. Have Legal Counsel Review All Licenses for New and Existing Open Source Software and Explain Them to their Agency Clients

Legal counsel should review all open source licenses for open source Software currently being used by your state, and for new open source Software that agencies are considering acquiring, and explain their meaning to their agency clients. Technologists are so familiar with boilerplate proprietary license terms that they rightly tend to focus on the variable provisions of such licenses, such as the number of licenses, rather than on the familiar legal terms. They and other Software users need to be educated about the unfamiliar terms that appear in open source licenses, preferably before the Software is downloaded and utilized.

4. When Developing A Large System, Have Legal Counsel Review all Licenses for Open Source Software that the Agency Proposes to Use, and Counsel the Agency as to the Impact of the Lack of Warranty and Indemnification Provisions

When agencies are developing large, mission critical systems, and plan to incorporate open source Software, in addition to assessing business and technical risks, they need to consider the risks posed by the lack of warranty and indemnification provisions in open source licenses. The more critical the application to the mission of the agency, the greater the importance of having a deep pocket to turn to if the Software is defective.

The mechanism by which the Software is selected should also be reviewed by counsel. If the agency itself chose the open source Software without consultation with the vendor performing the development, the vendor may have little or no liability if the system fails. If the vendor performing the development played a major role in selecting the open source Software, the selection process should be well documented and the vendor is a potential source of backup if system failure can be tracked to a careless choice of open source Software.

Counsel should review all open source licenses for Software that will be involved in the project, ask whether the vendor recommended the use of such Software, and consult with their agency clients regarding the impact of the open source license's terms on the project's vendor-state risk-shifting profile.

5. Legal Review Prior to Distribution Outside the State Enterprise

Prior to distributing open source code outside the state government, agencies should consult with legal counsel to ensure that the proper license is affixed to the code, that the conditions imposed on distribution have been met, and that the distribution will not expose the state to indemnification risk.

6. Keep Track of Modifications and Enhancements

Agencies should keep a record of modifications and enhancements to the open source code that they use. Modifications and enhancements should be documented in the state's open source inventory in a timely manner.

7. Balance the Need for Access to the Code with the Need to Limit Source Code Access to Those Who Need It to Perform Their Jobs

Agencies could minimize their legal risks by limiting source code access to those who need it to perform their jobs, and keeping a record of such access. It is true that, the more individuals who have access to the source code, and therefore the opportunity to violate the license by failing to comply with its terms regarding Software development and distribution, the greater the risk of using open source Software. Yet states need to minimize these legal risks against the need for each state to cultivate a community of talented individuals who take ownership of the modification and improvement of the code. Each state must strike a balance between minimizing the legal risks associated with access to code within their own organization and maximizing the utility of creating their own open code community.

8. Consider Market Based Models for Shifting Legal Risks.

The marketplace has responded to the new legal risks posed by the use of open source Software by the emergence of vendors who provide, for a fee, insurance, indemnification, and/or code replacement agreements as a means of managing the risk of intellectual property infringement and other legal risks posed by the use of open source Software. Often, these entities also provide for a fee professional services and support. These entities include Red Hat, Novell, HP, Sun, and Open Source Risk Management. Many such services are offered only in connection with Linux. In some cases, states should consider whether, for a particular system, shifting the legal risks inherent in open source use to this type of entity makes sense for them. States should keep in mind, however, that because their risk of suffering financial loss as a result of third party intellectual property infringement litigation is significantly less than that of private sector licensees, their return on investment for using market-based services solely for the purpose of reducing exposure to third party intellectual property claims is minimal.

9. Document All Software Development Projects

States should ensure that all Software development projects funded by them are documented to capture information about the use of open source and proprietary code and the licenses under which such code is used; the names of all individuals who contributed to the project; and their signed work for hire agreements. Otherwise, it will be

difficult to acquire the information necessary to maintain an up to date enterprise wide inventory of open source Software.

V. Conclusion

Use of either open source or proprietary Software poses some legal risk to states. States face fewer risks in connection with the use of open source Software compared to their private sector counterparts, and the risks that they do face can be managed.