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db4objects and the Dual Licensing Model

By Heather Meeker

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The dual licensing model is fast becoming one of the most popular business models for software companies leveraging the power of both open- and closed-source software development. It is important for users of software to understand how to leverage this model, without jeopardizing their intellectual property rights or risking the negative publicity that results from violating open source licenses. This white paper explains the factors you should consider when deciding what licensing option to choose for a product offered under a dual licensing model.

What is Dual Licensing?

Dual licensing is a business model where the licensor offers software under both commercial licensing terms (sometimes called "proprietary" terms) and open source licensing terms. Most dual licensing models use the GNU General Public License version 2 (the "GPL") for the open source channel. There are several flavors of dual licensing models: sometimes the product in the two different channels is different (with the commercial channel including extra features) and sometimes the two channels offer identical products -- sometimes referred to as a "pure" dual licensing model.

db4objects, Inc. ("db4objects") offers a pure dual licensing model for the object database engine db4o. This allows db4objects' customers to choose to license db4o software under either the GPL or db4objects' commercial license. This paper is intended to help adopters of the db4o software to make an informed choice between those two licensing options.

The GPL Option

Although GPL version 2 is the most widely used open source license, and perhaps the most commonly used software license in the world, there is still much confusion over its scope and meaning. In particular, many software developers are not confident that they understand how the GPL will affect their rights in software they create for integration with GPL code. Partly this is due to a lack of objective information. Statements about the meaning and enforcement of the GPL tend to be made by advocates (such as the Free Software Foundation ("FSF"), the organization that stewards the GPL) or by detractors (such as SCO, which argued in a court case that the GPL was "unconstitutional"). The license itself is challenging to understand on its face, and has been the subject of much commentary -- most of which carries no actual legal authority. Also, there is much folklore in the software development community about what the GPL means, and many developers have their own notions of its meaning -- some of which are outdated or inaccurate. The good news is that you are unlikely to have difficult questions about the GPL's meaning unless you are distributing GPL'd software. The GPL allows use of software -- as opposed to distribution -- freely, with no restriction.

GPL is a “free software” license, but terminology like this can be misleading or confusing to the uninitiated. But as the FSF says, think free speech, not free beer. Free software actually carries a significant cost -- in the sense of a restriction that is the quid pro quo for the broad rights granted by the GPL. This is called the “copyleft” requirement -- which is the defining characteristic of a free software license. This requirement means that if you receive code under the GPL, and if you distribute that code to anyone else, you can only provide it under the terms of the GPL, and you must provide the source code upon request. This also applies to any changes you make to the code -- which in copyright terms is called preparing a derivative work. So, to expand on the statement above, the GPL allows use and modification of software with no restriction -- but there are significant obligations if you distribute the software.

Challenging the GPL

db4objects chose the GPL because it is a widely used and accepted open source license. Everyone in the open source community understands that there are legal uncertainties about the GPL. You may hear some people claim that the GPL is unenforceable, unconstitutional, or easy to avoid. Relying on such claims or trying to find loopholes is perilous. Not only may you run afoul of the rights of the author of the GPL code (like db4objects), flouting the GPL can have a significant public relations downside. If you find that you are trying to decide between using dual licensed software via the GPL option and skirting the rules of the GPL, or using the software via the commercial option, choose the commercial option. While it’s always possible that, some day, a court may hold the GPL unenforceable, or interpret it in a way the industry does not expect, most companies do not consider it the best use of their resources to fight that legal battle -- which would likely be the case of the nascent century in software law.

You may hear people argue about whether the GPL is a contract or not. The important thing to understand is that whether it is or not, if you accept code under GPL terms you must abide by the GPL. If you breach the GPL, your rights under GPL license terminate, and you have no right to use the code at all. If this happens, you will be infringing the licensor’s copyright, and copyright infringement puts you at risk of civil damages or even criminal culpability with the possibility of heavy fines.

The advantage of a dual license model is that it allows licensees who are uncomfortable abiding by the GPL to finesse all those issues by opting for a commercial license.

The Commercial Option

db4objects’ commercial licensing option is consistent with custom and practice in commercial software licensing arrangements. First, unlike the GPL option, it includes options for premium, fee-based, 24/7 software technical support. Second, it allows you to distribute in object code format only, which would contravene the copyleft requirements of the GPL. Finally, of course, the commercial license is a fee-based license. Entering into a commercial license means you are entering into a business relationship with db4objects with all its benefits.

Advantages of the Dual Model

There are some excellent advantages to a dual model, over a traditional, binary-only licensing model. First, you can try before you buy. This short-circuits the sometimes difficult negotiations about acceptance testing or warranty returns and refunds that can slow down software acquisition deals. Second, there is no need to negotiate source code escrows -- you can always get the source code if you need it, through the GPL channel. Last, you get the benefits of the contributions of the db4objects community-at-large (in addition to db4objects' fee-based premium support services).

How to Decide: GPL or Commercial License?

If you are making this decision for the first time, it may seem to you that the downside of the dual licensing model, compared to the traditional, proprietary licensing model, is having to decide which option is right for you. The dual licensing model is more flexible than a traditional, binary-only licensing model; dual licensing gives you the GPL option in addition to -- not instead of -- the comparable commercial options. To a customer, having more options is always better, even if that means a choice must be made.

This paper is intended to help you to keep your decision costs at a minimum by providing a convenient decision tree:

Are you an end user or a distributor?

This is an important threshold question, because the GPL's "copyleft" requirements only apply when software is *distributed*. That means the GPL option is usually more attractive to end users than distributors.

You are an end user if you will use the software only for your own personal or internal use, and do not plan to provide copies of the software to anyone else. The exact contours of what constitutes "distribution" that triggers the copyleft requirements of the GPL are unsettled, but here are some things you should consider.

- If you run a web server, you may be a distributor. While making a service available on-line using GPL software often does not constitute distribution, this line can be crossed by accident. Service provider models often involve distribution of client software or provision of copies to run behind the firewalls of large customers. It's easy to decide you are an end user, but forget to reconsider when the time comes to update your product or business model, or do a large customer deal.
- If you work with subcontractors, or if you are a subcontractor yourself and you deliver software to anyone outside your organization, your work can become subject to the GPL. There are some limited exceptions to this, such as subcontracting development services or to wholly-owned subsidiaries. If you have questions about this you should seek expert legal advice to help you understand whether your planned activities would constitute distribution.
- If you need to provide the software to corporate affiliates other than wholly-owned subsidiaries, or allow its use by sales partners or customers, that will probably constitute distribution.

Decision Points for End Users

If you are not a distributor under any of the considerations above, and will only be an end user, then your decision is fairly simple: Do you want single point contact and direct support for the software? If you want professional, private and direct support with 24/7 response time guarantees for the db4o software and other benefits of a direct business relationship with db4objects, then you should purchase a commercial license. In all other cases, as an end user, you can simply use the free, GPL version and the free community support of db4o software.

Decision Points for Distributors

If you have determined that you don’t qualify as an end user, as described above, or if you are a distributor, such as a developer of an application using the db4o software, you have to decide whether you choose the commercial or the GPL option. The commercial licensing option is straightforward and exactly tailored for the redistribution scenario. If you are a distributor and considering db4objects’s GPL option, you must decide whether you want or need to adhere to the copyleft requirements of the GPL. This is usually a significant business decision that needs to be made at a board or top management level.

The scope and meaning of the GPL is the subject of much controversy. But there are several commonly accepted “black letter” rules, and several gray areas.

- **Modifications**. If you modify and distribute GPL code, your changes must also be covered by the GPL.
- **Aggregation**. If you include additional software programs in the same product package, or on the same distribution medium, as GPL code, the copyleft requirements of the GPL do not extend to those other programs, as long as they are not in the same executable as the GPL code.
- **Separate Processes**. If you integrate additional software programs with GPL code, but they run as separate processes from the GPL code, the copyleft requirements of the GPL do not extend to those other programs, because they are not in the same executable as the GPL code. It is possible for one program to run another, for instance, or communicate via data streams like HTML, without being part of the same process or executable.
- **GPL Executables**. This is a controversial point. The FSF takes the overarching position that all code included in the same executable as GPL code must be covered by the GPL. But there are a few recognized exceptions.
  - The “User Space” exception. If you program applications for an operating system covered by the GPL (i.e. Linux), the applications need not be covered by the GPL because the operating system is. In other words, there is a line between user space and operating system space, and programs can talk to each other across that line without being considered part of the same executable.
  - The “Java” exception. Similarly, you can write GPL applications on top of a proprietary platform like Java, as long as the GPL code communicates with the proprietary code via standard platform routines (like standard Java classes).
  - Linking -- Dynamic and Static. You may hear some people say that the copyleft requirements of the GPL do not apply to code that is dynamically linked -- as opposed to statically linked -- to GPL code. This is contrary to the position of the FSF, which says that linking code into the same executable as GPL code means all the linked code must be covered by the GPL. The FSF has a different license -- called the LGPL -- that allows dynamic linking to proprietary code. But the GPL does not. By the way, you may hear some people claim that it is OK to distribute dynamically linked binary modules, as long as you make your licensees do the linking after you distribute it. That is another attempt at creating a loophole, and is usually considered a violation of the GPL.

This may sound complicated -- and GPL compliance can be a difficult question.

For db4o software in particular, it is actually very simple. To incorporate the db4o software into a product, you must compile your application against the db4o software, and this will mean the db4o software is in the same executable with your application, and integrated via dynamic links. Therefore, the db4o software must always be linked with your application and thus your modifications are always subject to the terms of the GPL.

Distribution with the Commercial Option

Most commercial distributors will prefer the commercial option to the GPL option. Simply contact db4objects' sales department to negotiate your personalized redistribution agreement.

Distribution with the GPL Option

If you are willing and able to distribute your application in its entirety under the GPL and in full compliance with the terms of the GPL, your decision is also an easy one – simply download, use and distribute the db4o software and your application under the GPL. If you decide to take this option, db4objects assists you in making your application available to the community by allowing you to register the URL where you make your source code available (learn more about project registration here: http://www.db4o.com/about/company/legalpolicies/gplfaq.aspx#Article5). This is an easy way to comply with the copyleft terms of the GPL, and will also help you enjoy the benefits of participation from the db4o developer community.

But there are serious limitations when you choose the GPL option, whether your application consists entirely of code developed by you or includes code you have licensed from third parties. If you intend to provide your application in binary form only, you probably will not be able to comply with the copyleft requirements of the GPL, and you will need to choose the commercial license instead. Also, if your application contains third party proprietary code, you probably cannot choose the GPL option, because you will not have the right to distribute the third party code under the GPL (with the special exception of db4objects's open source compatibility license -- see below).

In the final analysis, of course it is a business decision whether you choose to redistribute under the GPL. If you open source your software under the GPL, you must first be comfortable knowing that your software will be freely copied, modified and redistributed by your users, the db4objects community and other third parties, including your own competitors.

The Free/Open Source Software Compatibility Exception (dOCL)

If you are running a development project that uses an open source license other than GPL, you may be interested in db4objects' FLOSS exception license. You may have heard of this kind of license being used by MySQL. This license allows you to make a very limited exception to the copyleft requirements of GPL. This license, which is called the db4objects' Open Source Compatibility License ("dOCL") allows the use and distribution of db4o software by open source projects not distributed under GPL, without the need to acquire a fee-based commercial license. Under this license, if you link the db4o software to your own application, your own application may be distributed under an alternate open source license (such as the LGPL, BSD, Apache, or EPL licenses) instead of GPL together with the db4o library itself, which will be re-licensed under the GPL. To exercise this option you need to register your project with the db4o community. For more information and a list of compatible open source licenses, see http://www.db4o.com/about/company/legalpolicies/docl.aspx.

Conclusion

db4objects' dual license model gives you a choice when it comes to licensing the db4o software. You can either benefit from the GPL option or you can choose a commercial license similar to what you would expect from a commercial vendor.

Dual licensing is the wave of the future in the software industry and is always preferable to a single licensing model, because you have more choices as a customer. This new wrinkle in software procurement strategy requires a little homework, but it is well worth it for the benefits.

For more legal information, please take a look at db4objects' corporate policies on the GPL and GPL licensing at http://www.db4objects.com/about/company/legalpolicies/.

If you have additional, specific questions about db4objects' licensing model or the db4o products, contact the db4objects sales department by mailing to sales@db4objects.com, and they will be happy to help you.

This white paper provides information about the law designed to help you determine your own legal needs. But legal information is not the same as legal advice -- the application of law to an individual's specific circumstances. db4objects has provided this paper as a courtesy to its potential customers and the community. You should consult a lawyer if you want professional assurance that this information, and your interpretation and application of it to your own situation, is accurate and appropriate to your needs and business goals.