CHAPTER 2

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The next paragraph, Paragraph 9, is an example of a license provision imposing, or attempting to impose, a generational limitation that puts substantial limitations on the licensing of derivative works, as opposed to requiring an attribution or prohibiting putative endorsements. Because of ambiguous drafting, it is not immediately apparent what this paragraph is attempting to accomplish, but it appears that the requirement that it imposes on licensees to ensure that licensees of their own, derivative, works are similarly bound is not as stringent as that of other licenses discussed later in this book. The paragraph begins:

9) Acceptance and Termination. If You distribute copies of the Original Work or a Derivative Work, You must make a reasonable effort under the circumstances to obtain the express assent of recipients to the terms of this License.

There are problems with this first sentence. First, it is not immediately clear that the licensor intends that the provisions of this license also govern the derivative works created by the licensee and derivative works created by the licensee's licensees and so forth. This sentence should probably be interpreted to mean that licensees assent to the proposition that the original work is in fact governed by the license; not necessarily that any derivative work be governed by the terms of that license. Second, and perhaps no less importantly, this sentence requires only that the licensee use "reasonable effort under the circumstances" to obtain assent of future licensees to the terms of the license, with regard both to the original and derivative works. A putative licensee, even one generation removed, could argue that because a previous licensee had not communicated these restrictions, the putative licensee believed that the work was bound by fewer than all the restrictions of the license or by no restrictions at all. The following sentence attempts to address this second problem.

Nothing else but this License (or another written agreement between Licensor and You) grants You permission to create Derivative Works based upon the Original Work or to exercise any of the rights granted in Section 1 herein, and any attempt to do so except under the terms of this License (or another written agreement between Licensor and You) is expressly prohibited by U.S. copyright law, the equivalent laws of other countries, and by international treaty.

As already noted, the statutory rights created by copyright bar any but limited use of a given work. The fact that a particular work is open source licensed does not remove its protection by the copyright laws. As the second sentence of this paragraph states, without the grant of rights by the license (along with the restrictions coupled thereto), no use of the copyrighted work is permitted. This "saves" the license and supports the argument that a putative licensee is bound by the terms of the license even if that licensee has not expressly assented to the terms of the license. Without some knowledge of the license, the putative licensee would have no reason to believe that he or she had any right at all to the work. Accordingly, such a putative licensee could be presumed to be "on notice" of the possibility of license restrictions and accordingly could be found to have legal liabilty for violating the terms of the license if he or she does not make sufficient efforts to determine the restrictions of the license. As discussed in Chapter 6, this provision, and similar ones in the licenses, is critical to the legal enforcement of open source licenses. The final sentence of this paragraph largely reiterates the effect of the second sentence: that use of the work is bound by the terms of the license and that exercise of rights under the license indicates consent to the restrictions imposed by it:

Therefore, by exercising any of the rights granted to You in Section 1 herein, You indicate Your acceptance of this License and all of its terms and conditions.

Paragraph 10 creates a disincentive for licensees to sue licensors for patent infringement. It is questionable how much this adds to the license, insofar as it seems unlikely that any person believing that he had or would have a legitimate claim for patent infringement against the creator of the work would use that work. Nonetheless, the license includes it, perhaps to avoid the unlikely, but undeniably awkward, situation in which the same person is suing the licensor and profiting in some manner from the use of the licensor's work.

10) Termination for Patent Action. This License shall terminate automatically and You may no longer exercise any of the rights granted to You by this License as of the date You commence an action, including a cross-claim or counterclaim, for patent infringement (i) against Licensor with respect to a patent applicable to software or (ii) against any entity with respect to a patent applicable to the Original Work (but excluding combinations of the Original Work with other software or hardware).

The remainder of the license provisions consists largely of terms common to commercial contracts. Paragraph 11 provides for choice of the jurisdiction in which suits under the license may be brought:

11) Jurisdiction, Venue and Governing Law. Any action or suit relating to this License may be brought only in the courts of a jurisdiction wherein the Licensor resides or in which Licensor conducts its primary business, and under the laws of that jurisdiction excluding its conflict-of-law provisions. The application of the United Nations Convention on Contracts for the International Sale of Goods is expressly excluded. Any use of the Original Work outside the scope of this License or after its termination shall be subject to the requirements and penalties of the U.S. Copyright Act, 17 U.S.C. 101 et seq., the equivalent laws of other countries, and international treaty. This section shall survive the termination of this License.

In general, choice of venue and choice of law provisions specifically identify the court and law that govern. For example, a typical provision might specify that "Claims arising under this contract may only be brought before courts of competent jurisdiction within the State of New York. The law governing the resolution of such claims shall be the law of the State of New York without giving effect to the choice of laws provisions thereof." Because of the open source nature of the license, however, and so that derivative works can be licensed under it without changing the text, the license tracks the jurisdiction in which suits can be brought (and the law that applies to the interpretation of the license) to follow the place in which the licensor resides or conducts its primary business. While this open-ended provision is somewhat problematic in that a licensee may face some uncertainty because the residence of a given licensor might be unknown to the licensee, it seems likely that this provision would likely be enforced by a court as long as the licensor's residence could be readily determined.

Paragraph 12 contains a provision also fairly common in commercial contracts:

12) Attorneys Fees. In any action to enforce the terms of this License or seeking damages relating thereto, the prevailing party shall be entitled to recover its costs and expenses, including, without limitation, reasonable attorneys' fees and costs incurred in connection with such action, including any appeal of such action. This section shall survive the termination of this License.

In all United States jurisdictions, parties to a suit bear their own costs for bringing the suit in most cases. Fee shifting provisions like this one, however, are generally enforced. While there is considerable debate about the social utility of this rule, known as the American rule (in contrast to the British rule, in which the prevailing party has historically been able to collect attorneys fees along with other damages), the balancing of the benefits of it are beyond the scope of this book. This provision is a fairly common one in contracts, but it has nothing to do with open source, except perhaps that it may encourage licensors to more vigorously pursue licensees who clearly violate the terms of a given license.

Paragraph 13 is also typical to commercial contracts, and it makes clear that the license is the only agreement between the parties.

13) Miscellaneous. This License represents the complete agreement concerning the subject matter hereof. If any provision of this License is held to be unenforceable, such provision shall be reformed only to the extent necessary to make it enforceable.

Such provisions, known as "merger clauses," are generally included in contracts to make clear that pre-existing written agreements or oral agreements are superseded by the particular contract. This provision operates on an open source license as it would in any other agreement. The second sentence is a severability clause, preserving the effect of other sections of the license if a section is found to be invalid.

Paragraph 14 defines "You" as it is used in the license to include agents of the licensee or other persons within the control of the licensee.

14) Definition of "You" in This License. "You" throughout this License, whether in upper or lower case, means an individual or a legal entity exercising rights under, and complying with all of the terms of, this License. For legal entities, "You" includes any entity that controls, is controlled by, or is under common control with you. For purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

This provision is probably not necessary. To the extent that any person or entity not under the control of a particular licensee exercises any of the rights described in Paragraph 1 of the license, they would likely be found to be directly bound by the license. The fact that they are associated with or controlled by another licensee would accordingly not matter.*

Finally, Paragraph 15 of the license provides that:

15) Right to Use. You may use the Original Work in all ways not otherwise restricted or conditioned by this License or by law, and Licensor promises not to interfere with or be responsible for such uses by You.

This paragraph adds no restrictions on licensees not already articulated by the license, but rather adds an additional restriction on the licensor, i.e., non-interference in uses permitted by the license. This is a somewhat problematic provision, as it could be interpreted to create legal liability for licensors in situations in which the drafter of this license probably did not intend to create liability. For example, a licensor whose work competes directly with that of a licensee could, at least in theory, be liable for "interference" with sales of the licensed work. While this is probably unlikely, it is not impossible that such a lawsuit could be maintained. It is almost certainly not the result contemplated by the drafter of the license.

The final un-numbered paragraph of the license sets out that while licensors can use the license, they cannot modify its terms without permission.

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Application and Philosophy

All of these licenses have been used in practice, both in licensing software maintained in the open source community and in providing the basis for commercial applications of programs derived from open source models. The BSD, MIT, and Apache Licenses, longer established and more frequently adopted than the Academic Free License, provide the examples described in this section.

Each of these three licenses has contributed to the widespread commercial adoption of the programs they license, frequently (though not always) through incorporation into products distributed under a proprietary license. This is completely consistent with the language and intent of the licenses. This also reflects their place of origin. For example, both Berkeley Unix and the X Window System were research projects; the goal of their creators was to explore technology, to provide a proof-of-concept implementation, and then to permit others to build on that work. Commercial applications readily followed successful implementations of research ideas.

^{*} This provision is discussed further in Chapter 3 in connection with the Mozilla Public License.

BSD Unix became the basis for commercial versions of Unix ranging from Sun's Solaris to Apple's Mac OS X. BSD-derived proprietary versions of Unix outstripped the commercially licensed AT&T versions relatively quickly, and they dominated the commercial Unix market until the 1990s when Unix was challenged by GPL-licensed Linux distribution. The TCP/IP software stack that was part of the Berkeley networking release became the basis for almost all commercial TCP/IP stacks, including Microsoft's. The X Window System became the standard GUI platform for the Unix workstation market, displacing Sun's proprietary NeWS windowing system. In addition, even as these commercial implementations became available at the same time, open sourced implementations continued to be widely available and accessible for modifications and improvements by programmers.

Despite setbacks from a lawsuit from AT&T that was ultimately settled out of court in 1992, Berkeley Unix still has many million installations, running such well-known sites as Yahoo!, and it continues to be modified and improved. Moreover, and partly as a result, later commercial entrants such as Apple have tried to keep a better defined line between the open source foundations of their programs and their proprietary extensions.

Other individual parts of Berkeley Unix continued to flourish as parts of the free software ecosystem. For example BIND, the Berkeley Internet Name Daemon, continued to be maintained by its original author, Paul Vixie* under the auspices of the Internet Software Consortium. Despite many commercial implementations, the open source version of BIND continues to be the definitive version that runs the Internet's Domain Name System (DNS), the single most mission-critical piece of software in the Internet infrastructure. Sendmail, another piece of Berkeley Unix, continues to be maintained by its creator, Eric Allman, who founded a company in 1998 to commercialize the software. He adopted a hybrid proprietary/open source strategy, completely consistent with the licenses, in which some new features of interest to commercial clients are released in proprietary software, while the open source version is also still maintained.

In short, research-style licenses, like the BSD and MIT Licenses, are ideal for situations in which you want wide deployment of your ideas and do not care whether this results in open source software or proprietary software. Because of their openness to commercial use, the programs they license can be, by many metrics, more influential. Red Hat maintains a Linux business that makes approximately \$90 million in annual revenues, while Sun Microsystems has revenues of approximately \$18 billion. There are literally billions of dollars of economic activity associated just with the Internet software stack originally released under the Berkeley License.

Nonetheless, the very success of the commercial developments premised on programs distributed under these licenses could be said to undermine the purpose of

^{*} The specifications for this program were written by Paul Mockapetris.

open source licensing. The argument could be made, for example, that the widespread adoption of commercial versions of such programs discourages open source development and encourages the creation of code closed off to the open source community by proprietary licenses. It could be regarded as a failure that the highly sophisticated Solaris software was developed as proprietary software,* that Microsoft was able to build a version of MIT's Kerberos security software that contains proprietary extensions for communicating with Microsoft servers, or that Microsoft was able to build so easily on the Internet infrastructure software.

It cannot be said, however, that such a result is inconsistent with the text and the intent of these licenses or that such types of commercial uses were not foreseen by their drafters. The original BSD and X Window System developers intended their software to be used in this way. Some of these developers even built their own companies based on the open source software that they had originally written. Bill Joy was one of the founders of Sun Microsystems; Eric Allman was able to found Sendmail, Inc.

The one well-known case in which the software authors were unhappy with their choice was the licensing of the MIT Kerberos security program. As Microsoft appeared to embrace and extend Kerberos, the authors wished they had used a more stringent license like the GPL. Of course, in that case, Microsoft would have chosen another basis for their security software, and Kerberos would have been less widely used. Nonetheless, the authors may have reasonably felt that a more restrictive license might have better protected the development of the software that they had anticipated.

Moreover, at least for certain types of programs, the nature of the function performed by the software makes additional license restrictions unnecessary to maintain an open development model. The Apache license provides one such example. While there have been several proprietary commercializations of Apache (such as the SSL-enabled Stronghold), the free version of Apache has retained its dominant market share as the result of two dynamics:

- 1. Strong branding. The Apache License's requirement that derived works cannot use the Apache name gives a significant degree of protection.
- 2. Standards-compliance. Because Apache is communications-oriented software, its need to adhere to standards such as the HTTP protocol prevents proprietary extensions. Of course, this protection remains only as long as Apache or other standards-compliant web servers retain dominant market share. Were Apache to lose its dominant market share, its protocols would no longer control, and this advantage would disappear.

^{*} Sun has recently announced that it will release Solaris under an open source license, a major victory for open source

These licenses, like all open source and free software licenses, permit forking and the subsequent fragmentation of projects. The multiple, and mutually incompatible, versions of BSD (FreeBSD, NetBSD, OpenBSD) provide one such example. However, this is less a result of the dynamic of the license itself than it is of the complex social dynamic involved in large software projects. The original BSD project leaders moved on to other activities, and the software was taken up by new people with different goals. This dynamic is discussed in more detail in Chapter 7.