UNITED STATES DISTRICT COURT NORTHERN DISTRICT OF CALIFORNIA

Neo 4 j, Inc., , a Delaware corporation,	CASE NO. 5:18-cv-07182
Plaintiff,	
v.	
PureThink, LLC, a Delaware limited liability company,	EXPERT REPORT OF
IGOV, INC., a Virginia corporation, and	BRADLEY M. KUHN
JOHN MARK SUHY, an individual.	
Defendants.	

EXPERT REPORT OF BRADLEY M. KUHN 22 DECEMBER 2022

Introduction

- 1. I am providing this expert report in support of Defendants: PureThink, LLC, IGOV, Inc. and John Mark Suhy.
- 2. This expert report primarily discusses the issues of the removal of the Commons Clause ("CC") from the "Neo4j Sweden Software License" and Suhy's and/or PureThink, LLC's and/or IGOV, Inc.'s redistribution of the Neo4j software under the AGPLv3 with CC removed.
- 3. I am appearing as an expert in this case *pro bono publico*. I have asked Defendants' counsel only to cover direct costs of travel expenses to attend depositions and/or the trial (— should I be deposed and/or appear as a witness at trial in this case).

Qualifications

- 4. I am currently employed as the Policy Fellow of the Software Freedom Conservancy, Inc. ("SFC"), a 501(c)(3) not-for-profit organization founded in New York. SFC is a nonprofit organization centered around ethical technology. SFC's mission is to ensure the right to repair, improve and reinstall software. SFC promotes and defends these rights through fostering free and open source software (FOSS) projects, driving initiatives that actively make technology more inclusive, and advancing policy strategies that defend FOSS (such as copyleft).
- 5. My interest in computing began as a child, when I received my first computer as a gift from my parents and began to regularly write new software for it and share that software with my friends, who helped me improve it.
- 6. As an undergraduate, I studied Computer Science at Loyola College in Maryland (now called the Loyola University Maryland). I received from there in 1995 a summa cum laude Bachelor's Degree in Computer Science, and the James D. Rozics Computer Science Medal, which is an award given to the year's top student in Computer Science at each graduation. I was furthermore elected into Upsilon Pi Epsilon (the National Computer Science Honors Society) and the Phi Beta Kappa honors society, which is the USA's oldest academic honors society for the liberal arts.
- 7. From 1991 through 2001, I worked consistently on a part-time (while studying) and then a full-time (when not in school) basis as a system administrator and software developer. I administered, configured, programmed, and debugged a variety of Unix and Unix-like operating systems¹ and software for those

¹Unix was a computer operating system developed by AT&T in the early 1970s. Many systems were later developed that operated similarly like Unix, and are typically called "Unix-like" operating systems.

systems. My work experience spans the wide array of possible occupations that are typical for individuals trained in computer science.

- 8. From 1991-1995, while working as a programmer for the Baltimore Rh Typing Laboratories, Inc. (aka BRT Laboratories), I downloaded, configured, modified, and installed numerous Free and Open Source² (FOSS) programs. I became at that time an active participant in Usenet³, and, at the encouragement of my employer, began sharing code that I improved with others who sought to solve similar tasks, and collaborated with other developers online to improve that code.
- 9. I have continued my code contributions to FOSS on a semi-regular basis since that time. I have submitted patches derivative modification of the software, sent back to the original author for later inclusion to various projects. I have also served as the co-maintainer of FOSS projects at times.
- 10. In 1992, I began using the Linux-based systems. I downloaded in 1992 the "Soft Landing System", an early GNU/Linux distribution put together by volunteers, and installed it on my personal computer. My professors saw the value in this software, and requested that I install this software throughout the computer lab at my undergraduate institution. I did so, and was later employed by Loyola's computer science department to continue maintaining, modifying and administering these systems until I graduated.
- 11. In 1997, I began a graduate program in Computer Science at the University of Cincinnati. In early 2001, I graduated from that program, completing a Master's Degree with thesis. My thesis dealt with programming language topics related to the Open Source and Free Software programming language named Perl. This work required me to participate heavily in the Perl community and contribute libraries and modification to the internals of the Perl language implementation. The original inventor and author of Perl, Larry Wall, served on my thesis committee. My thesis was later used by Wall as one of the justifications for the launch of another related Open Source project, called the Parrot Virtual Machine.
- 12. In 1996, I began volunteering for the Free Software Foundation, Inc. ("FSF"). Initially, Richard M. Stallman, President of the FSF, asked me to serve as a webmaster for the FSF and GNU websites. (GNU is an independent project that is fiscally sponsored by the FSF.)
- 13. As webmaster, I assisted in creation and editing of the initial "license list" page on the GNU website. This page, a version of which is still available today on the GNU website, explains the details of various software licenses and whether they meet GNU's criteria for Free Software licenses meaning they give

²The term "Open Source" did not come into common usage until 1999, so it is somewhat anachronistic to use it referring to events that took place before then. However, I include here as it is a term more familiar to those outside of the field of computer science.

³Usenet was a worldwide discussion forum that was widely used by scientists, researchers, and programmers in the 1980s and early 1990s.

users the freedom to copy, share, modify and redistribute the software — and whether the licenses are compatible with the FSF's own licenses. In assisting Dr. Stallman with this type of work, as I have done on a regular basis from the late 1990s through October 2019, I first developed and then improved my expertise interpreting the requirements and details of FOSS licenses.

- 14. As time went on in my career, I began to specialize specifically in the specific sub-area of FOSS licenses called "copyleft licensees". Copyleft licenses are FOSS licenses that have specific requirements that assure users' and consumers' right to copy, modify, and redistribute the software both non-commercially and commercially (i.e., as part of a business endeavor).
- 15. In 2000, I was hired to work for the FSF, initially remotely from Cincinnati, and then on-site in Boston upon completion of my Master's thesis in 2001. I was promoted multiple times, and eventually became Executive Director of the FSF, a role which I served in until March 2005.
- 16. During my time as an employee of FSF, I assisted in various types of work related to software licensing and compliance with the GNU General Public License ("GPL"), the GNU Lesser General Public License ("LGPL") and other related and similar licenses. It was typical by the time of my departure that I led the resolution of thirty or more GPL violation matters each year, including a number that were made public, such as the OpenTV GPL violation and the original Linksys WRT54G violation.
- 17. In 2006, I volunteered to be the President of the SFC. Once the SFC began to receive funding, I became SFC's first employee. I have held multiple roles and positions at SFC.
- 18. In 2006 and 2007, I participated in the public process to comment on, evaluate, and make suggestions for the new version of the GPL (version 3). This work included many direct discussions with the GPLv3 drafters themselves.
- 19. In March 2010, I was elected to the Board of Directors of the FSF. I held a position on FSF's Board of Directors until October 2019.
- 20. Throughout my long affiliation with the FSF, and also through my daily work at SFC, my primary focus and expertise centers around issues related to "copyleft" licenses such as the GPL and the Affero General Public License ("AGPL").
- 21. While Executive Director of the FSF circa 2002, I was involved in many discussions internally at the FSF and with the public about what was then called the "web services loophole" in the GPL. Namely, since the copyleft terms of the traditional GPL triggered only on software distribution, and typical deployment on a

website (for server-side software) did not involve distribution to the software's users, no copyleft requirements were triggered.

- 22. Circa early 2002, based on the Computer Science concept called a "quine", I invented what is now known as the "Affero Clause". This idea was written up by others and used as part of the AGPL, version 1 ("AGPLv1"). The Affero Clause requires that users of software via a web interface must have the opportunity to request and receive the "Corresponding Source" of the software.
- 23. During the early stages of the public comment process for the GPLv3, I was involved in various discussions regarding whether the Affero Clause would be incorporated into GPLv3 itself, or if it would remain a separate license from the main GPLv3.
- 24. As part of the public comment process for drafting the GPLv3 (and, ultimately, the AGPLv3), four public, invite-only committees ("A" "D") were formed for draft discussion. I was invited to participate in "Committee D".
- 25. After the drafters of GPLv3 decided that the Affero Clause would not be included, and after the GPLv3 was officially published, I worked directly with the drafters to suggest and propose text for AGPLv3 §13—the only term of AGPLv3 that differs from the GPLv3, and the section which includes the "Affero Clause".
- 26. During my time as an employee at the FSF from the late 1990s until March 2005, I led and participated in many discussions with the general public about concerns, ideas, and issues related to copyleft licensing. I have continued that work both as a volunteer and employee at other organizations since then.
- 27. A key issue of study and concern was the issue of "Further Restrictions" that licensors attempted to place outside of the requirements of the GPL.
- 28. The issue of "Further Restrictions", and what terms copyleft licenses should incorporate to prevent the imposition of "Further Restrictions" became one of the many issues on which I developed expertise.

History of The "Further Restrictions" Copyleft Licensing Issue

- 29. The FOSS ecosystem depends heavily on the ability of third parties to understand their rights and engage in the unfettered freedom and right to copy, modify and redistribute software, in both non-commercial and commercial contexts.
- 30. A key policy tenet of copyleft licensing is assuring that copyleft license texts cannot be used to impose "Further Restrictions" on downstream recipients.
- 31. Imposition of Further Restrictions completely undermines the entire purpose of a copyleft license. Copyleft licenses are drafted carefully to guarantee rights of both individuals and firms that may receive the copyleft-licensed software after it has passed through (and been modified, repurposed, reconfigured and improved by) many different other entities.
- 32. The functioning of the FOSS ecosystem relies on individuals and firms to determine that when they receive a copy of FOSS software licensed under a specific FOSS license, that they can feel confident that the rights embodied in that license are unfettered and that there is no ambiguity or confusion about those rights.
- 33. Copyleft licenses go even a step further: they are designed and drafted to assure that no one in that entire distribution chain can change the terms of the license. The terms of the licenses guarantee that everyone who receives the software under that license has the precise same rights and permissions as everyone else.
- 34. Starting as early as 1996, and possibly earlier, I became aware in my work as a FOSS activist that there was a problematic practice in copyleft licenses. At the time, activists tended to call this the "no military use problem", because the issue came up most with regard to software authors who were also anti-war activists.
- 35. It was common throughout the late 1990s and into the early 2000s for anti-war activists who were also software authors to license their software under licenses that gave wide permissions, but prohibited any use by the any military (or, sometimes, specifically the USA military).
- 36. While many FOSS activists (including myself) were sympathetic to their concerns about FOSS being used in the military industrial complex, we nonetheless felt strongly that the rights and permissions to copy, modify and redistribute should remain unfettered even for those who applied the software to activities that some of us found abhorrent. Thus, restrictions on military use, or really any specific application of the software, was never included in any widely adopted copyleft license.

- 37. However, it became quite common between circa 1996–2005 for anti-war activists to license their software under a potentially ambiguous license —- often formulated as "GPL, but military use is prohibited" (or some similar formulation).
- 38. During my time as an employee of the FSF from 1997–2004, I regularly handled community discussions, requests, and (most importantly) complaints from users who expressed that this Further Restriction of "military use prohibited" was problematic for the copyleft ecosystem for various reasons.
- 39. While the "military use prohibited" clauses were the most common, during the time frame of 1997–2004, I recall seeing many different formulations of Further Restrictions tacked onto the GPLv2 in various ways. I specifically recall seeing Further Restriction targeted at specific companies, or (quite ironically), I recall at least once seeing "GPL, non-commercial use only" as a license for software.
- 40. During this period, my standard answer (which as FSF's Executive Director, I made the official response for all such inquiries) was to inform those who complained and/or inquired that software under such a license (— one that referenced the main GPL, version 2 ("GPLv2") text but then added a Further Restriction) was software that was ultimately *not FOSS*.
- 41. Our reasoning for this conclusion was that the license might be construed and/or perceived as somewhat ambiguous. On one hand, the GPLv2 assured even the military's right to copy, modify, and redistributed the software provided they continued to provide all who received distribution of the software the Corresponding Source. On the other hand, a term had been added to the overarching license that contradicted those terms. Furthermore, the GPLv2 explicitly prohibited the imposition of Further Restrictions, but provided no remedy for what downstream recipients should do in that situation. Users were simply advised to completely avoid software under such a license.
- 42. Frustrated at the lack of a better solution, everyone that I knew involved in copyleft license policy (including various past and current employees, Directors, and others at the FSF itself) agreed that this issue should be resolved by a provision in future versions of the GPL.
- 43. The problem continued in the FOSS community after I left the employment of the FSF in March 2005. On or about 2006-08-14, a (now defunct) project named "GPU" was actively covered in the press because the project has had added an Further Restriction prohibiting military use. A true and correct copy of an article written by the (then) journalist Tina Gasperson for linux.com is included in Exhibit A.

The Public GPLv3 Drafting Process and Relevant Historical Records Online

44. The GPLv3/AGPLv3 drafting process was (primarily) a public process run by the FSF from circa late 2005 through the release of the AGPLv3 on 2007-11-19. The FSF released a comprehensive archive of all public materials related to the drafting process. Then entire archive can be downloaded from:

https://gplv3.fsf.org/gplv3-archive.tar.gz

That large archive file is linked from https://www.fsf.org/licensing/gplv3-archive. For purposes of this report, I extracted all exhibits and materials regarding the GPLv3/AGPLv3 drafting process from that archive, which I verified on 2022-12-20 was downloadable from FSF's website. I refer to this archive in the remainder of this report as the "GPLv3 Archive".

45. On 2006-01-16, the FSF released the first public discussion draft of the GPLv3. Exhibit B is a true and correct copy of the document the following file found in the GPLv3 archive:

gplv3.fsf.org/gpl-draft-2006-01-16.txt/download.

- 46. On or about 2006-07-26, the FSF released the second public discussion draft of the GPLv3. A true and correct copy of the FSF's published change-tracked markup (from discussion draft 1) which includes footnotes for rationale of changes. Exhibit C is a true and correct this copy of the following file found in the GPLv3 archive: gplv3.fsf.org/gpl3-dd1to2-markup-rationale.pdf/download.
- 47. On 2006-08-03, the FSF published a supplementary opinion on the "Additional Terms" section of GPLv3 at https://gplv3.fsf.org/additional-terms-dd2.html Exhibit D is a true and correct copy of that document, which appears in the GPLv3 Archive:

gplv3.fsf.org/additional-terms-dd2.pdf/download

- 48. On 2007-03-28, the FSF released the third public discussion draft of the GPLv3. A true and correct copy of the FSF's published change-tracked markup (from discussion draft 2) is found in Exhibit F, which is found in the GPLv3 Archive at: gplv3.fsf.org/gpl3-dd2to3.pdf/download.
- 49. On 2007-11-19, the FSF released the Affero GPL version 3 ("AGPLv3"). A true and correct copy of the AGPLv3, as downloaded from https://www.gnu.org/licenses/agpl-3.0.txt is in Exhibit H.
- 50. While the FSF began providing on 2021-11-17 the comprehensive archive file ("GPLv3 Archive") for archival convenience of researchers and licensing practitioners, to my knowledge and recollection, the FSF has also continuously made available these aforementioned discussion drafts, license texts, and rationale documents in an easily accessible and browsable format on the website https://gplv3.fsf.org from their publication dates until present day.

History of AGPLv3§7¶3 and its Prohibition On "Further Restrictions"

- 51. The first public discussion draft of GPLv3, released on 2006-01-16, presented to the public the first attempt at the "Further Restrictions" clause: "No other additional conditions are permitted in your terms; therefore, no other conditions can be present on any work that uses this License."
- 52. I recall that there was substantial discussion between publication of the first and second discussion draft—informed by experiences that the FSF, I, and others had advising the community (described above in ¶ 41 and earlier paragraphs)—about developing a method for GPLv3 that would liberate downstream users and redistributors to address the problem themselves.
- 53. In the second discussion draft of GPLv3, the FSF presented a Further Restriction clause that stated: "Additional requirements are allowed only as stated in subsection 7b. If the Program as you received it purports to impose any other additional requirement, you may remove that requirement" (Exhibit C, page 20).
- 54. In the contemporaneously published public rationale document for this draft term, the FSF stated: "Here we are particularly concerned about the practice of program authors who purport to license their works under the GPL with an additional requirement that contradicts the terms of the GPL, such as a prohibition on commercial use. Such terms can make the program non-free, and thus contradict the basic purpose of the GNU GPL; but even when the conditions are not fundamentally unethical, adding them in this way invariably makes the rights and obligations of licensees uncertain" (Exhibit C, page 20).
- 55. In a follow-up opinion a few weeks later, the FSF wrote: "if a user receives GPL'd code that purports to include an additional requirement not in the [GPLv3§]7b list, the user may remove that requirement. Here we were particularly concerned to address the problem of program authors who purport to license their works in a misleading and possibly self-contradictory fashion, using the GPL together with unacceptable added restrictions that would make those works non-free software" (Exhibit D, page 3).
- 56. In the third public discussion draft of GPLv3, the FSF presented a modified "Further Restrictions Clause" as follows: "If the Program as you received it, or any part of it, purports to be governed by this License, supplemented by a term that is a further restriction, you may remove that term" (Exhibit F, page 15). This clause is carried forward, without further modification, into the fourth discussion draft in 2007-05-31, and to the final official release of GPLv3 on 2007-06-29.
- 57. As with any public comment process, there were differing views throughout the drafting process on the relative merits of the Further Restrictions Clause. Ultimately, as can be seen in the final draft, the Clause

was *included*. In my opinion, the drafting process bore out the best option for the copyleft community. The FSF clearly agreed, since they included the Clause in the final version of the license.

58. Other participants clearly agreed as well. For example, on 2007-06-01, the day after the release of the fourth discussion draft, User "frx", whom I recall was a regular public commentor throughout the GPLv3 drafting process, submitted comment 3,220 in the GPLv3 process – commenting specifically on the Further Restrictions Clause: "I'm glad to see that this is explicitly stated: every attempt to license a work under the terms of GPLv3 with further restrictions is equivalent to licensing under the plain GPLv3. This is good, since there are unfortunately many people that license works in inconsistent manners (such as GPLv2 + additional restrictions); creating a rule that resolves this kind of inconsistencies for the better is a good thing to do". A record of this comment is available at:

https://gplv3.fsf.org/comments/rt/readsay.html?filename=gplv3-draft-4&id=3220

A true and correct copy of that comment can be found in Exhibit E.

- 59. The AGPLv3 contains the same Further Restrictions Clause unmodified from the version as it appeared in third public discussion draft of GPLv3.
- 60. The public who uses the text of the AGPLv3 and GPLv3 have been on notice by the FSF since (at least) 2007-03-28 that this term is an important and essential part of the license. Furthermore, the FSF transparently and publicly communicated the intent and expectations for utilization of the Further Restrictions Clause in their license drafting rationale documents that led up to the final draft of that Clause.
- 61. I conclude based on these documents, plus my recollection of the GPLv3 and AGPLv3 drafting process in which I participated, and my extensive work with the FSF and SFC in copyleft licensing, that the Further Restrictions Clause was specifically design to allow removal of an additional term when a licensor chose to use the text of the GPLv3 and/or AGPLv3 along with a term that the licensee viewed as a "Further Restriction".

On Removal and Modification of FOSS Terms By Downstream Users

- 62. In the world of proprietary software licensing, it is undoubtedly exceedingly rare that a downstream user has permission to modify the terms upon redistribution.
- 63. In FOSS, this practice is quite common. Such modification of terms occurs both implicitly and explicitly.
- 64. Implicitly, it is widely understood that certain non-copyleft licenses, such as the widely used MIT license, are "Compatible" with copyleft licenses such as the AGPLv3.

65. Individual developers, commercial software firms, and hobbyists routinely include MIT-licensed software in larger AGPLv3'd works. When doing so, they implicitly relicense those MIT-licensed works under the AGPLv3.

66. Authors of MIT-licensed works encourage other developers and firms to incorporate these works not only in AGPLv3'd works, but also in proprietary software works as well. In effect, their license implicitly encourages such incorporation.

67. Copyleft licenses, being more complex, have explicit terms for Compatibility that require downstream users to take explicit actions to combine works under different licensing terms.

68. For example, the Lesser General Public License, v2.1 (LGPLv2.1) in its §3 states: "You may opt to apply the terms of the ordinary GNU General Public License instead of this License to a given copy of the Library. To do this, you must alter all the notices that refer to this License, so that they refer to the ordinary GNU General Public License, version 2, instead of to this License".

69. LGPLv2.1 is just one example where the downstream user is required and encouraged to make changes to the license notices of a copyleft license.

70. As such, changing and modifying license notices based on instructions given in a larger document is customary and normal activity for FOSS developers, and has been so at least since the publication of LGPLv2.1 in February 1999.

The "Further Restrictions" And Their Removal

71. I have reviewed the document enterprise/neo4j-enterprise/LICENSE.txt.

This document appears on https://github.com/neo4j/neo4j at 2018-05-20 in

Git revision 47d845925e639297ab2564965ba68105d897e818.

A true and correct copy of this license, appears as Exhibit G. This is the entirety of AGPLv3 as published by the FSF in Exhibit H, with the addition of the further restrictions outlined in the Commons Clause ("CC"). I understand from this litigation that the Court prefers to refer to this document as the "Neo4j Sweden Software License". For consistency, this report also refers to this document by that name.

72. In my professional opinion, the Neo4j Sweden Software License is structured and presented precisely in the manner that the Further Restrictions Clause anticipated.

- 73. Specifically, I believe that the AGPLv3 contemplated this precise situation: namely, a licensor licenses under the unmodified text of the AGPLv3, but also includes another term that contradicts, limits, and/or restricts the permissions granted under the AGPLv3.
- 74. If I had encountered the "Neo4j Sweden Software License" during the normal course of my work as a FOSS activist and FOSS licensing expert, I would have felt removal of the CC portion, upon redistribution of the software, was permitted by the AGPLv3's Further Restrictions Clause.
- 75. In my opinion, when John Mark Suhy encountered the Neo4j Sweden Software License, his removal of the CC and redistribution of the Covered Work under pure AGPLv3 would be considered customary, permissible, and even widely encouraged in the field of FOSS.

Neo4j's Own Licensing Choice Permitted Removal of "Commons Clause"

- 76. In my opinion, the Neo4j Sweden Software License itself gave Suhy, PureThink, LLC, and IGOV, Inc. this permission explicitly. Specifically, even if one firm is the only copyright holder and therefore sole licensor of the work⁴, the Neo4j Sweden Software License has the entire the AGPLv3 entirely *intact*, *including* its Further Restrictions Clause.
- 77. Akin to text of the LGPLv2.1, the Neo4j Sweden Software License states the two following facts:
 - "[This software] is subject to the terms of the GNU AFFERO GENERAL PUBLIC LICENSE Version 3, with the Commons Clause as follows:" . . .
 - "If the Program as you received it, or any part of it, contains a notice stating that it is governed by this License along with a term that is a further restriction, you may remove that term"
- 78. In my opinion, given the common FOSS practices of either explicitly or implicitly changing terms upon redistribution within the confines and requirements stated in the license, any reasonable party would determine that the Neo4j Sweden Software License intends given that it was intentionally drafted to include the Further Restrictions Clause that the CC can be removed by anyone who engages in redistribution (be it commercial or non-commercial) of the software covered by the Neo4j Sweden Software License.

Other Licensing Options for Neo4j Software

79. In the FOSS community, the "GNU Affero General Public License" and "GNU General Public License" are well-known brands (owned by the FSF). These are held in high esteem by software developers who care about the political issue of software rights and freedom.

 $^{^{4}}$ ¶ 99 and following discusses the potential outcomes if, in fact, there is not a sole licensor of the work

- 80. Developers routinely look to confirm that software is licensed under the AGPLv3 or GPLv3 before using or relying on the software.
- 81. Based on my personal knowledge and discussions with staff and Board members of the FSF, the FSF is aware of the power of their brand recognition and, as an organization, the FSF cares deeply that developers can rely on the permissions and clauses in all versions of the GPL.
- 82. The FSF is a very small non-profit organization with extremely limited resources. I recall from my experience as a past employee that the FSF simply does not have sufficient resources to police trademark infringement of its registered trademark on "GNU" and its common-law trademark on "GNU Affero General Public License".
- 83. I believe that the Further Restrictions Clause was, in part, included in the GPLv3 and AGPLv3 to assure that the community could rely on the fact that if the text of the entire AGPLv3 was included in the licensing of some software, that Further Restrictions could not be placed on that software.
- 84. The FSF does permit licensors to reuse various portions of their license texts, *provided that* the licensors do not use the brand names of the GNU licenses, and do not include the preamble text.
- 85. Specifically, the FSF states in their GPL FAQ: "You can legally use the GPL terms (possibly modified) in another license provided that you call your license by another name and do not include the GPL preamble, and provided you modify the instructions-for-use at the end enough to make it clearly different in wording and not mention GNU". Exhibit I is a true and correct copy the relevant FAQ text as found at:

https://www.gnu.org/licenses/gpl-faq.en.html#ModifyGPL.

86. According to The Internet Archive, similar text has appeared on FSF's GNU website since 2012-01-07. Exhibit J is a true and correct copy of the relevant FAQ text as it was indexed by the Internet Archive at the following link:

https://web.archive.org/web/20120107170516/https://www.gnu.org/licenses/gpl-faq.en.html#ModifyGPL

- 87. I confirm that in the field of FOSS licensing, FSF's policy is well-known and oft discussed. Commonly, provisions, terms, and clauses from the GPL routinely are reused in other FOSS (and non-FOSS) licenses, with permission from the FSF via their public statement quoted in ¶ 85.
- 88. Given this, it is reasonable and customary for FOSS developers and firms that use FOSS to rely on FOSS licensing information as presented when text from the AGPLv3 is involved. Specifically, when software users and/or redistributors encounters the full, unmodified text of the AGPLv3 (even with a Further Restriction),

the users and/or redistributors customarily believe in good faith that the choice of licensing in this manner was intentional.

89. Users and/or redistributors are keenly aware that software providers do have the option to construct their own license using terms similar to the AGPLv3 under a different name and without the preamble. Therefore, if a license that has the full text of the unmodified AGPLv3, users and/or redistributors have a good faith basis to exercise any and all clauses of the AGPLv3 — including the Further Restrictions Clause and its permission to strike and remove additional restriction clauses.

MongoDB's Modified AGPLv3

- 90. MongoDB, Inc. ("MongoDB") is well-known and has a software offering (itself also called MongoDB) that competes with the Neo4j software in the field of NoSQL database software.
- 91. For many, MongoDB licensed their primary software product under the terms of the AGPLv3.
- 92. On 2018-10-16, MongoDB announced that the product would be licensed under a new licensed, which they named the Server-Side Public License ("SS Public License"). A true and correct copy of that license appears in Exhibit K, which was printed from:

https://www.mongodb.com/licensing/server-side-public-license

- 93. The SS Public License is textually nearly identical to the AGPLv3; however, MongoDB clearly followed the requirements of the FSF described in ¶ 85.
- 94. While the FOSS community widely rejected the SS Public License, MongoDB was widely considered to be operating under the permissions and rules established by the FSF for reuse of their license text.
- 95. It is notable that the release and promotion (widely covered in the technology press) of the SS Public License was nearly contemporaneous with the surreptitious licensing change that created Neo4j Sweden Software License.
- 96. In my opinion, it seems highly unlikely that the drafters of the Neo4j Sweden Software License were unaware of MongoDB's approach to their license change. As such, drafters of the Neo4j Sweden Software License was almost surely aware that they had the options presented under ¶ 85 to produce a fully modified AGPLv3 sans the preamble and with no mention of FSF's trademark "GNU" instead of the Neo4j Sweden Software License.
- 97. In my opinion, this speaks to clear intentionally in choosing a license that included the Further Restrictions Clause. In my opinion, after my many years of carefully monitoring use of the AGPLv3 and its

modifications in the industry, the Neo4j Sweden Software License was structured and promoted to give users the **incorrect** impression that the CC could not be removed from those terms — even though the Further Restrictions Clause was present. The Neo4j Sweden Software License also gives the impression to the unwary that the software is still available under the AGPLv3, as it had been before.

98. In essence, my opinion is that the Neo4j Sweden Software License attempted to inappropriately capitalize on the goodwill, power, and notoriety of the "GNU" and "AGPLv3" brands while also frightening commercial redistributors with the addition of the CC. In my opinion, the Neo4j Sweden Software License unfairly confuses users by including the entire text of the AGPLv3 (unmodified). I firmly believe that Neo4j hoped that no one would notice the Further Restrictions Clause remained included, and thereby realize that CC could, in fact, be removed and that commercial activity by downstream redistributors could therefore continue under pure AGPLv3.

Violation of AGPLv3 If Not Sole Licensor

- 99. I am very familiar with the business model of "Proprietary Relicensing" whereby a single firm holds rights to relicense all copyrights contained in a work so that they can simultaneously issue a copyleft license and a proprietary one. I first encountered this business model in the early 1990s when it was employed by a company called MySQL AB (now owned by Oracle), and have often seen it utilized since then by many companies, including MongoDB and with the Neo4j software.
- 100. Permission to engage in Proprietary Relicensing is completely predicated on universal collection of permissions and rights sufficient to act as sole licensor of the Covered Work under AGPLv3.
- 101. This process runs counter to the typical method of FOSS contribution, which is often called "inbound=outbound". In the inbound=outbound FOSS contribution method, third-party contributors license their works under the project's primary license (in the case of the Neo4j software, AGPLv3). The upstream project coordinator is then bound by AGPLv3 as a redistributor of these third party works. The upstream project coordinator is often a major (and sometimes even majority) author of the entire work, but typically substantial portions are copyrighted by other contributors and licensed to the upstream project coordinator only under the project's license.
- 102. To engage in Proprietary Relicensing, a firm must studiously, diligently and carefully avoid the standard inbound=outbound approach to FOSS collaboration. Typically, firms accomplish this task by requiring all contributors to formally and officially assent to a Copyright Assignment Agreement or a Contributor Licensing Agreement that grants (either exclusive or non-exclusive) rights to the firm to issue licenses for the work other than the project's outbound FOSS license.

- 103. If a firm fails to properly gather such rights from all contributors going back to the very beginning of the project then the copyleft license (in this case, the AGPLv3) explicitly prohibits the firm from engaging in Proprietary Relicensing.
- 104. If rights from every contributor to the Covered Work that constitutes the Neo4j software offerings were not properly gathered and consolidated under the control of a single entity, then distribution of the Neo4j software under any license other than AGPLv3 is, itself, a violation of the AGPLv3. In that case, every license issued that is not strictly AGPLv3 would, in my opinion, constitute a violation of the license.
- 105. Specifically, if the primary authors of the Neo4j software failed to universally collect relicensing permission for all secondary authors and contributors to the Covered Work, then addition of CC to the Neo4j Sweden Software License is outright prohibited for this additional reason a reason orthogonal to downstream users' right to remove CC pursuant to AGPLv3's Further Restrictions Clause.
- 106. Meanwhile, assent from all contributors to issue licenses other than AGPLv3 was properly collected and consolidated into one entity, then that provides further indication that a license other than AGPLv3 could confidently be issued.
- 107. For example, with such collected and consolidate rights, assents and permissions, the rights holder could instead follow MongoDB's example and issue an entirely new public license for their software provided they followed the rules and permissions granted to them by the FSF \P 85.

Conclusion

- 108. Based on all the material that I have reviewed, combined with my detailed knowledge and familiarity with FOSS licensing and how firms typically use FOSS licensing and engage in and with contributors and downstream redistributors, I conclude the following:
- 109. In my opinion, the Neo4j Sweden Software License intentionally includes the Further Restrictions Clause as a term of that license.
- 110. In my opinion, there is widespread understanding in the FOSS community of the purpose and function of the Further Restrictions Clause. As such, Suhy acted in a reasonable, customary, good faith, and correct manner when removing CC from the Neo4j Sweden Software License and licensing the software under AGPLv3 to his customers and/or the public.
- 111. In my opinion, given the extensive publicity of MongoDB's SS Public License, FSF's FAQ, and other widely understood licensing knowledge regarding AGPLv3, those who promulgated the Neo4j Sweden Soft-

ware License were (or should have been) aware that they could construct their own license, picking and

choosing their preferred clauses from the AGPLv3 under the rules outlined by the FSF in ¶ 85.

112. In my opinion, it is reasonable, customary, in good faith, and correct for redistributors to believe that

the Neo4j Sweden Software License intentionally included the Further Restrictions Clause. The authors of

the Neo4j Sweden Software License should have expected that the Further Restrictions Clause would be

used to remove CC from the Neo4j Sweden Software License. If they wanted to prevent that behavior, they

should have (and could have, provided they had sufficient rights to all contributions to be licensed) removed

the Further Restrictions Clause.

113. In my opinion, if a single firm failed to diligently and formally collect explicit, written relicensing

permission from all contributors to all code that was licensed under AGPLv3, that distribution of the Neo4j

software under the Neo4j Sweden Software License is in violation of AGPLv3 (wholly unrelated to the Further

Restrictions Clause). If such rights have not been diligently and carefully collected and consolidated, no entity

may engage in Proprietary Relicensing business nor issue the Neo4j Sweden Software License legitimately.

In other words, without such consolidation of rights, the only legitimate license of the Neo4j software is

AGPLv3.

I declare under penalty of perjury under the laws of the United States of America that all statements and

affirmations made herein of my own knowledge are true and correct, and all statements made on information

and belief are believed to be true and correct.

Executed on 22 December 2022

By:

17

Exhibit A

Expert Report of Bradley M. Kuhn 22 December 2022

"Open source project adds 'no military use' clause to the GPL" by Tina Gasperson, published on $2006\mbox{-}08\mbox{-}14.$







TOPIC - AUDIENCE - RESOURCES - ABOUT US

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News

Open source project adds 🕆 🗴

Open source project adds "no military use" clause to the GPL

By - August 14, 2006 **●** 2152

Author: Tina Gasperson

GPU is a Gnutella client that creates ad-hoc supercomputers by allowing individual PCs on the network to share CPU resources with each other. That's intriguing enough, but the really interesting thing about GPU is the license its developers have given it. They call it a "no military use" modified version of the GNU General Public License (GPL).

Tiziano Mengotti and Rene Tegel are the lead developers on the GPU project. Mengotti is the driving force behind the license "patch," which says "the program and its derivative work will neither be modified or executed to harm any human being nor through inaction permit any human being to be harmed."

Mengotti says the clause is specifically intended to prevent military use. "We are software developers who dedicate part of our free time to open source development. The fact is that open source is used by the military industry. Open source operating systems can steer warplanes and rockets. [This] patch should make clear to users of the software that this is definitely not allowed by the licenser."

He says some might think an attempt to prevent military use might be "too idealistic" and would not work in practice, but he references the world of ham radio, whose rules specify that the technology is not to be used commercially. "Surprisingly enough, this rule is respected by almost every ham operator."

The developers readily acknowledge that the "patch" contradicts the original intention of the GPL, to provide complete freedom for users of software and source code licensed under it. "This license collides with paragraph six of the Open Source Definition," is how they word it in the license preamble.

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The developers readily acknowledge that the "patch" contradicts the original intention of the GPL, to provide complete freedom for users of software and source code licensed under it. "This license collides with paragraph six of the Open Source Definition," is how they word it in the license preamble.

Richard Stallman, the founder of the Free Software movement and author of the GPL, says that while he doesn't support the philosophy of "open source," neither does he believe software developers or distributors have the right to try to control other people's activities through restricting the software they run. "Nonetheless, I don't think the requirement is entirely vacuous, so we cannot disregard it as legally void."

"As a pacifist, I sympathize with their goals," says Russ Nelson, a founding board member of the Open Source Initiative (OSI). "People who feel strongly about war will sometimes take actions which they realize are ineffectual, but make it clear that they are not willing to take action which directly supports war."

Tegel says he doesn't fully agree with the inclusion of the clause in GPU's license. "I see the point, and my personal opinion supports it, but I am not sure if it fits in a license," he says. "Like our Dutch military: I can say it is bad because it kills people and costs money. But on the other hand, we were taught by both our leftist and rightist teachers to enjoy our freedom due to the alliance freeing us from Nazis, a thing which I appreciate very much."

Both developers do agree about one aspect of their license clause. It is based on the first of science fiction writer Isaac Asimov's Three Law of Robotics, which states, "A robot may not harm a human being, or, through inaction, allow a human being to come to harm." That, they say, is a good thing, "because the guy was right," Tegel says, "and he showed the paradox that almost any technological development has to solve, whether it is software or an atom bomb. We must discuss now what ethical problems we may raise in the future."

Category:

Legal

Provious article

Movt orticlo

Exhibit B

Expert Report of Bradley M. Kuhn 22 December 2022

First discussion draft of the GPLv3, as published by the FSF on 2006-01-16.

GNU GENERAL PUBLIC LICENSE Discussion Draft 1 of Version 3, 16 Jan 2006

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Exhibit C

Expert Report of Bradley M. Kuhn 22 December 2022

Second discussion draft (and rationale therefor) for the GPLv3, as published by the FSF on or about 2006-07-26.

GPLv3 Second Discussion Draft Rationale

This document states the rationale for the changes in the second discussion draft of GPLv3. We present the changes themselves in the form of markup, with strikeout indicating text we have removed from the draft and **bold** indicating text we have added. Footnotes state the reasons for specific changes. Several of these reasons refer to opinions we are releasing with the second discussion draft.

We refer to the first and second discussion drafts of GPLv3 as "Draft1" and "Draft2," respectively.

GNU General Public License

Discussion Draft 4 2 of Version 3, 16 Jan 27 July 2006

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Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software—to make sure the software is free for all its users. We, the Free Software Foundation, use the GNU General Public License for most of our software; it applies also to any other program whose authors commit to using it. (Some Free Software Foundation software is covered by the GNU Lesser General Public License instead.)¹ You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs;, and that you know you can do these things.

To protect your rights, we need to make requirements that forbid anyone to deny you these rights or to ask you to surrender the rights. These

¹This parenthetical reference to the GNU LGPL is unnecessary and is less relevant now that we have written the new version of the LGPL as a set of permissive exceptions to the GNU GPL in accord with section 7.

restrictions translate to **Therefore**, you have certain responsibilities for you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

Developers that use the GNU GPL protect your rights with two steps: (1) assert copyright on the software, and (2) offer you this License which gives you legal permission to copy, distribute and/or modify the software.

For the developers' and author's authors' protection, the GPL clearly explains that there is no warranty for this free software. If the software is modified by someone else and passed on, the GPL ensures that recipients are told that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations. For both users' and authors' sake, the GPL requires that modified versions be marked as changed, so that their problems will not be associated erroneously with the original version.

Some countries have adopted laws prohibiting software that enables users to escape from Digital Restrictions Management. Some computers are designed to deny users access to install or run modified versions of the software inside them. DRM This is fundamentally incompatible with the purpose of the GPL, which is to protect users' freedom; to change the software. therefore Therefore, the GPL ensures that the software it covers will neither be subject to, nor subject other works to, digital restrictions from which escape is forbidden not be restricted in this way.²

Finally, every program is threatened constantly by software patents. States should not allow patents to restrict development and use of software on general-purpose computers, but in places where they do, we We wish to avoid the special danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, the GPL makes it clear assures that any patent must be licensed for everyone's free use or not licensed at all patents

²DRM becomes nastier when based on Treacherous Computing and other changes in computer hardware which deny users the possibility of running modified or alternate programs. When these measures are applied to GPL-covered software, the freedom to run the program becomes a sham. In the statement on DRM in the Preamble we now emphasize this fact rather than the imposition of laws used to enforce and supplement these technical restrictions.

cannot be used to render the program non-free.³

The precise terms and conditions for copying, distribution and modification follow. 4

0. Definitions.

A "licensed program" means any program or other work distributed under this License.⁶ "The Program" refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either modified or unmodified.⁷ In this License, each licensee is addressed as "you," while "the Program" refers to any work of authorship licensed under this License. Throughout this License, the term "modification" includes, without limitation, translation and extension. A "modified" work includes, without limitation, versions in which material has been translated or added.⁸ A work

³The patent licensing practices that section 7 of GPLv2 (corresponding to section 12 of GPLv3) was designed to prevent are one of several ways in which software patents threaten to make free programs non-free and to prevent users from exercising their rights under the GPL. GPLv3 takes a more comprehensive approach to combatting the danger of patents.

⁴This statement is redundant and therefore unnecessary. In addition, while the requirements of the GPL specifically concern copying, distribution, and modification, as these terms are commonly understood by free software users, the GPL speaks of other aspects of users' rights, as for example in affirming the right to run the unmodified Program.

 $^{^5}$ See n. 4.

⁶In Draft1 the term "licensed program" was defined but never used.

⁷Our efforts to internationalize the terminology of GPLv3 were incomplete in Draft1, as can be seen in the definition of "work based on the Program," which continued to use the United States copyright law term of art "derivative work." Some have suggested that the use of "containing" in this definition is not clear. We replace this definition with a generalized definition of "based on" that is neutral with respect to the vocabularies of particular national copyright law systems. See Opinion on Denationalization of Terminology.

⁸We replace the definition of "modification" with a definition of "modified" (work), which we then use as the basis for our new generalized definition of "based on." This in turn provides us with an alternative to the definitions in GPLv2 and Draft1 that incorporated the United States copyright law term "derivative work." See Opinion on Denationalization of Terminology.

We regard the well-established term "extension" (of a program), used in the now-replaced definition of "modification," to be equivalent to adding material to the program.

"based on" another work means any modified version, formation of which requires permission under applicable copyright law. A "covered work" means either the unmodified Program or any a work based on the Program. Each licensee is addressed as "you".

To "propagate" a work means doing anything with it that requires permission under applicable copyright law, other than except executing it on a computer, or making private modifications that you do not share. This Propagation includes copying, distribution (with or without modification), making available to the public, sublicensing, and in some countries other activities as well. To "convey" a work means any kind of propagation that enables other parties to make or receive copies, excluding sublicensing. 12

A party's "essential patent claims" in a work are all patent claims that the party can give permission to practice, whether already acquired or to be acquired, that would be infringed by making, using, or selling the work.¹³

We note that copyright law, and not arbitrary file boundaries, defines the extent of the Program.

⁹See nn. 7–8 and Opinion on Denationalization of Terminology. We have generalized the definition of "based on" beyond "work based on the Program"; note that a "work based on the Program" no longer includes the Program.

¹⁰We replace the term "private" in the definition of "propagate" with wording that describes behavior. "Private" has many, often conflicting, meanings in legal and common usage.

¹¹The copyright laws of many countries other than the United States, as well as certain international copyright treaties, recognize "making available to the public" or "communication to the public" as one of the exclusive rights of copyright holders. See Opinion on Denationalization of Terminology.

¹²See Opinion on Denationalization of Terminology. In Draft1 we defined "propagate" in order to free the license from dependence on national copyright law terms of art. However, Draft1 continued to use the term "distribute," a term that varies in scope in those copyright law systems that recognize it, while applying the conditions for distribution to all kinds of propagation that enable other parties to make or receive copies. This approach proved confusing, and showed the incompleteness of our efforts to internationalize the license. Draft2 now provides a new definition of "convey" and replaces "distribute" with "convey" throughout its terms and conditions, apart from a few idiomatic references to software distribution that are not meant to incorporate the copyright law term of art.

Because we now expressly prohibit sublicensing under section 2 (see n. 34), we have also excluded it from the definition of the new term "convey" (and removed it as an illustrative example of propagation).

¹³As part of our effort to clarify the wording of the express patent license of Draft1, resulting in the covenant not to assert patent claims of Draft2, we provided a new definition of "essential patent claims" to specify, more precisely than we did in Draft1, the set of patent claims that are licensed (or, as we now formulate it, subject to the covenant not to

1. Source Code.

The "source code" for a work means the preferred form of the work for making modifications to it. "Object code" means any non-source version of a work.

The "System Libraries" ¹⁴ of an executable work ¹⁵ include every subunit such that (a) the identical subunit is normally included as an adjunct in the distribution of either a major essential component (kernel, window system, and so on) of the specific operating system (if any) on which the object code runs, or a compiler used to produce the object code, or an object code interpreter used to run it, and (b) the subunit (aside from possible incidental extensions) serves only to enable use of the work with that system component or compiler or interpreter, or to implement a widely used or standard interface for which an implementation is available to the public in source code form. ¹⁶

The "Complete Corresponding Source Code" ¹⁷ for a work in object code form means all the source code needed to understand, adapt, modify,

assert). Most notably, we removed the reference to "reasonably contemplated use," which several members of our discussion committees argued was unclear. We also used the verbs that, in most countries, define the basic exclusive powers of patent holders (making, using, and selling the claimed invention). See Opinion on Covenant Not to Assert Patent Claims.

Having factored out and revised the definition of "essential patent claims," we realized that we could also use it to clarify the patent retaliation clause of section 2. See Opinion on Patent Retaliation.

¹⁴The definition of Corresponding Source ("Complete Corresponding Source Code" in Draft1) is the most complex definition in the license. In our efforts to make the definition clearer and easier to understand, we removed the exception in the final paragraph of section 1 and rewrote it as the definition of the new term "System Libraries," which we then use in the first paragraph of the definition of Corresponding Source.

¹⁵The definition of System Libraries is inapplicable to non-executable object code works; with this definition, such works have no System Libraries.

¹⁶In Draft1, a system component that implemented a standard interface qualified for the system library exception if the implementation required "no patent license not already generally available for software under this License." This wording was read by many to mean that the system library exception imposed an affirmative duty to investigate third-party patents, something which we had never intended. Our general concern was to ensure that there would be no obstacle to supporting the implementation in free software; now we have specified this without explicit reference to patents. The revised wording in the definition of System Libraries removes the reference to patents while requiring the interface to have a freely-available reference implementation.

¹⁷We made the trivial change of shortening "Complete Corresponding Source Code" to "Corresponding Source," an abbreviation we had already used in section 6 of Draft1.

compile, link generate, install, and (for an executable work)¹⁸ run the object code and to modify the work,¹⁹ excluding except its System Libraries, and except general-purpose tools or generally available free programs which are used unmodified in performing those activities but which are not part of the work. For example, this Corresponding Source includes any scripts used to control those activities, interface definition files associated with the program source files, and any the source code for shared libraries and dynamically linked subprograms that the work is specifically designed to require,²⁰ such as by intimate complex data communication²¹ or control flow between those subprograms and other parts of the work, and interface definition files associated with the program source files.

The Complete Corresponding Source Code also includes any encryption or authorization codes keys²² necessary to install and/or execute the modified versions from source code of the work, perhaps modified by you, in the recommended or principal context of use, such that its functioning in all circumstances is identical to that of the work, except as altered by your modifications they can implement all the same functionality in the same range of circumstances.²³ (For instance, if the work is a DVD player and can play certain DVDs, it must be possible for modified versions to play those DVDs. If the work communicates with an online service, it must be possible for modified versions to communicate with the same online service in the same way such that the service cannot distinguish.)²⁴ It also includes any decryption

¹⁸For non-software works covered by the GPL, the concept of "running" of object code will generally be meaningless.

¹⁹In revising this part of the definition of Corresponding Source, we have responded to concerns that some of our wording, which we meant to be expansive, and particularly the verbs "understand" and "adapt," was too vague or open-ended. In defining what source code is included in Corresponding Source, we now focus on source code that is necessary to generate and (if applicable) execute the object code form of the work and to develop, generate and run modified versions.

²⁰We clarify that the shared libraries and dynamically linked subprograms that are included in Corresponding Source are those that the work is "specifically" designed to require, making it clearer that they do not include libraries invoked by the work that can be readily substituted by other existing implementations.

 $^{^{21}\}mathrm{We}$ substitute "complex" for "intimate," which some readers found unclear.

²²We replaced the term "codes" with "keys" to avoid confusion with source code and object code.

²³We believe that this wording is clearer than the wording it replaces.

²⁴The previous version of this paragraph was read more broadly than we had intended. We now provide specific examples to illustrate to readers the kinds of circumstances in

codes necessary to access or unseal the work's output.²⁵ Notwithstanding this, a code A key need not be included in cases where use of the work normally implies the user already has it the key and can read and copy it, as in privacy applications where users generate their own keys. However, the fact that a key is generated based on the object code of the work or is present in hardware that limits its use does not alter the requirement to include it in the Corresponding Source.²⁶

The Corresponding Source may include portions which do not formally state this License as their license, but qualify under section 7 for inclusion in a work under this License.²⁷

The Complete Corresponding Source Code need not include anything that users can regenerate automatically from other parts of the Complete Corresponding Source Code.

As a special exception, the Complete Corresponding Source Code need not include a particular subunit if (a) the identical subunit is normally included as an adjunct in the distribution of either a major essential component (kernel, window system, and so on) of the operating system on which the executable runs or a compiler used to produce the executable or an object code interpreter used to run it, and (b) the subunit (aside from possible incidental extensions) serves only to enable use of the work with that system component or compiler or interpreter, or to implement a widely used or standard interface, the implementation of which requires no patent license

which users must receive keys along with the source code in order for their ability to modify software to be real rather than nominal. See Opinion on Digital Restrictions Management.

²⁵Our reference to decryption codes generated much comment, and was misunderstood by many readers. It was intended to ensure that the program was not limited to production of encrypted data that the user was unable to read. We eventually concluded that this is unnecessary; as long as users are truly in a position to install and run their modified versions of the program, they could if they wish modify the original program to output the data without encrypting it. We have decided, therefore, to remove this sentence from the draft.

²⁶The mere fact that use of the work implies that the user *has* the key may not be enough to ensure the user's freedom in using it. The user must also be able to read and copy the key; thus, its presence in a special register inside the computer does not satisfy the requirement. In an application in which the user's personal key is used to protect privacy or limit distribution of personal data, the user clearly has the ability to read and copy the key, which therefore is not included in the Corresponding Source. On the other hand, if a key is generated based on the object code, or is present in hardware, but the user cannot manipulate that key, then the key must be provided as part of the Corresponding Source.

 $^{^{27}}$ This paragraph was previously the final paragraph of section 6; it is more appropriately included in the definition of Corresponding Source.

2. Basic Permissions.

All rights granted under this License are granted for the term of copyright on the Program, and are irrevocable provided the stated conditions are met. This License explicitly affirms your unlimited permission to run the **unmodified**²⁹ Program. The output from running it is covered by this License only if the output, given its content, constitutes a work based on the Program covered work. This License acknowledges your rights of "fair use" or other equivalent, as provided by copyright law.

This License gives unlimited³⁰ permission permits you to privately modify make and run privately modified versions of the Program,³¹ or have others make and run them on your behalf.³² provided you do not However, this permission terminates, as to all such versions, if you bring suit against anyone for patent infringement against anyone of any of your essential patent claims in any such version, for making, using, selling or distributing otherwise conveying their own works a work based on the Program in compliance with this License.³³

Propagation of covered works other than conveying is permitted without limitation provided it does not enable parties other than you to make or receive copies. Sublicensing is not allowed; section 10 makes it unnecessary.³⁴ Propagation which does enable them to do so Conveying

²⁸As we point out in n. 14, we replaced this paragraph with our new definition of "System Libraries" in the second paragraph of section 1.

 $^{^{29}}$ We add "unmodified," even though "the Program" is defined as the work as it is received by the licensee, to more clearly distinguish this permission from the permission in the following paragraph, which is subject to patent retaliation.

³⁰Strictly speaking, this permission, unlike the permission to run the unmodified Program, is not unlimited, since it may be terminated under the conditions stated in this paragraph.

³¹As we explain further in the Opinion on Patent Retaliation, we have revised this wording for clarity.

³²Inherent in the right to modify a work is the right to have another party modify it on one's behalf. We mention this explicitly to make clear that one cannot avoid the effects of the patent retaliation clause by contracting out the development of the modified version.

³³See Opinion on Patent Retaliation. The changes we have made in this paragraph more precisely define the permission as well as the kind of lawsuit that activates termination of the permission. For example, as noted in n. 13, we make use of the new defined term "essential patent claims."

³⁴The explicit prohibition of sublicensing ensures that enforcement of the GPL is always by the copyright holder. Usually, sublicensing is regarded as a practical convenience or

is permitted , as "distribution", under the conditions of sections 4-6 stated below. 35

3. Digital Restrictions Management No Denying Users' Rights Through Technical Measures.³⁶

As a free software license, this License intrinsically disfavors technical attempts to restrict users' freedom to copy, modify, and share copyrighted works. Each of its provisions shall be interpreted in light of this specific declaration of the licensor's intent.³⁷ Regardless of any other provision of this License, no permission is given to distribute covered works that illegally invade users' privacy, nor³⁸ for modes of distribution conveying that deny users that run covered works the full exercise of the legal rights granted by this License.

No covered work constitutes part of an effective technological "protection" measure under section 1201 of Title 17 of the United States Code.÷ that is to say, distribution of a covered work as part of a system to generate or access certain data constitutes general permission at least for development, distribution and use, under this License, of other software capable of accessing the same data. When you convey a covered work, you waive any legal power to forbid circumvention of technical measures that include use of the covered work, and you disclaim any intention to

necessity for the licensee, to avoid having to negotiate a license with each licensor in a chain of distribution. The GPL solves this problem in another way, through its automatic licensing provision.

³⁵To simplify and clarify the text, we make use of the new defined term "conveying." See n. 12 and Opinion on Denationalization of Terminology.

³⁶In Draft1 only part of this section concerned Digital Restrictions Management, so the title was misleading. In Draft2 none of the section directly concerns DRM; parts of it are designed to thwart legal means of stopping users from changing free software that comes with DRM, but that is an indirect connection. We have retitled the section to state its direct focus. Our license must do what it can to resist the effects of technical measures to deny users' rights to copy, modify, and share software, and of the laws that prohibit escape from these measures. See Opinion on Digital Restrictions Management.

³⁷These sentences were intended to guide judicial interpretation of the license to resolve any ambiguities in favor of protecting users against technical restrictions on their freedom. We deleted this sentence as part of focusing the GPL's requirements on protecting the freedom to modify DRM-ridden software, rather than at the DRM itself.

³⁸The clause referring to illegal invasions of users' privacy was intended to provide developers a weapon, based in copyright, to combat spyware and malware, in order to supplement enforcement efforts of public authorities. The considerable public reaction to this provision, however, was overwhelmingly negative, and we therefore have decided to remove it.

limit operation or modification of the work as a means of enforcing the legal rights of third parties against the work's users.³⁹

4.[1] Verbatim Copying.

You may copy and distribute **convey** verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice; keep intact all license notices and notices of the absence of any warranty; **and** give all recipients, of **along with** the Program, a copy of this License along with the Program; and obey any additional terms present on parts of the Program in accord with the central list (if any) required by section 7. The recipients of these copies will possess all the rights granted by this License (with any added terms under section 7).⁴⁰

You may charge a fee any price or no price for the physical act of transferring a copy each copy that you convey,⁴¹ and you may at your

³⁹We revised the second paragraph of section 3 extensively, breaking it up into two sentences. The first sentence now makes specific reference to the anticircumvention provisions of the U.S. Digital Millennium Copyright Act. The second sentence is more generally directed, but its waiver and disclaimer respond specifically to the features of the anticircumvention provisions of the European Union Copyright Directive and its associated implementing legislation. Although our general approach in drafting GPLv3 has been to remove references to particular regimes of copyright law, and particularly those of the United States, the peculiar features of the different U.S. and European approaches to anticircumvention, and the graveness of the danger these laws pose to free software, demanded a more specialized solution. In particular, the EUCD appears to give implementers of technical restriction measures the power to waive the operation of anticircumvention law. The DMCA is worded differently; we believe its effects are best resisted by way of a declaration that covered works are not part of its "protection" measures. See Opinion on Digital Restrictions Management.

⁴⁰The principal changes in the first paragraph of section 4 concern the possible presence of additional terms on all or part of the Program. We removed wording that was inconsistent with section 7; the job it did is now done in section 7 itself. We also added wording that makes clear that the conveyor must provide the central list of additional terms required by section 7, and that recipients receive full GPL rights, supplemented by any additional terms that were placed on the Program.

⁴¹The original wording of this clause was meant to make clear that the GPL permits one to charge for the distribution of software. Despite our efforts to explain this in the license and in other documents, there are evidently some who believe that the GPL allows charging for services but not for selling software, or that the GPL requires downloads to be gratis. We referred to charging a "fee"; the term "fee" is generally used in connection with services. Our original wording also referred to "the physical act of transferring." The intention was to distinguish charging for transfers from attempts to impose licensing fees on all third parties. "Physical" might be read, however, as suggesting "distribution in a

5.[2] Distributing Conveying Modified Source Versions.

Having modified a copy of the Program under the conditions of section 2, thus forming a work based on the Program, you You may copy and distribute convey such modifications or a work based on the Program, or the modifications to produce it from the Program, in the form of source code under the terms of section 4 above, provided that you also meet all of these conditions:

- a. The modified work must carry prominent notices stating that you changed the work and the date of any change.
- b. You must license the entire modified work, as a whole, under this License to anyone who comes into possession of a copy. This License must apply, unmodified except as permitted by section 7 below, to the whole of the work, and all its parts, regardless of how they are packaged. This License gives no permission to license the work in any other way, but it does not invalidate such permission if you have separately received it.
- c. If the modified work has interactive user interfaces, each must include a convenient feature that displays an appropriate copyright notice, and tells the user that there is no warranty for the program (or that you provide a warranty), that users may redistribute convey the modified work under these conditions this License, and how to view a copy of this License together with the central list (if any) of other terms in accord with section 7. Specifically, If if the interface presents a list of user commands or options, such as a menu, a command to display this information must be prominent in the list.; Otherwise otherwise,

physical medium only." In our revised wording we use "price" in place of "fee," and we remove the term "physical."

⁴²There is no harm in explicitly pointing out what ought to be obvious: that those who convey GPL-covered software may offer commercial services for the support of that software.

⁴³Conveying a patch that is used to produce a modified version is equivalent to conveying the modified version itself.

⁴⁴We add to subsection 5b a simpler restatement of a point that was previously made in a more cumbersome way in the text following subsection 5c. Distributors may not use artful subdivision of a modified work to evade the GPL's copyleft requirement.

the modified work must display this information at startup—except in the case that the Program has such interactive modes and does not display this information at startup. However, if the Program has interactive interfaces that do not comply with this subsection, your modified work need not make them comply.⁴⁵

These requirements apply to the modified work as a whole. 46 If **To the extent that** identifiable sections of that **the modified** work, added by you, are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute **convey** them as separate works, **not specifically** for use not in combination with the Program. 47 But when you distribute the same sections for use in combination with covered works, no matter in what form such combination occurs, the whole of the combination must be licensed under this License, whose permissions for other licensees extend to the entire whole, and thus to every part of the whole. Your sections may carry other terms as part of this combination in limited ways, described in section 7.48

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.⁴⁹

A compilation of a covered work with other separate and independent works, which are not by their nature extensions of the covered work, in or on a volume of a storage or distribution medium, is called an "aggregate" if the compilation and its resulting copyright resulting from the compilation is are not used to limit the access or legal rights of the compilation's users beyond what the individual works permit. Mere inclusion Inclusion of a covered work in an aggregate does not cause this License to apply to the other parts of the aggregate.

 $^{^{45}}$ Responding to several public comments, we have rewritten the last sentence of subsection 5c to make it clearer. The substance is unchanged.

⁴⁶Subsection 5b makes this sentence redundant.

⁴⁷A separately-conveyed component that is designed only to be used in combination with and as part of a specific GPL-covered work ought to be considered part of that work, and not as a separate work.

⁴⁸The paragraph following subsection 5c was needlessly abstruse, as was made clear to us during the discussion process. We have made it shorter and, we think, clearer, removing wording duplicative of statements made elsewhere (such as in subsection 5b) and limiting use of the term "combination," which troubled many readers.

⁴⁹We have deleted this statement of intent; we consider it unnecessary. It also had the disadvantage of using terminology specific to U.S. copyright law.

6.[3] Conveying Non-Source Distribution Forms.

You may copy and distribute **convey** a covered work in Object Code object **code** form under the terms of sections 4 and 5, provided that you also distribute **convey** the machine-readable Complete Corresponding Source Code (herein the "Corresponding Source") under the terms of this License, in one of these ways:

- a. Distribute Convey the Object Code object code in a physical product (including a physical distribution medium), accompanied by the Corresponding Source distributed fixed on a durable physical medium customarily used for software interchange.; or,
- b. Distribute Convey the Object Code object code in a physical product (including a physical distribution medium), accompanied by a written offer, valid for at least three years and valid for as long as you offer spare parts or customer support for that product model, to give any third party, for a price no more than ten times your cost of physically performing source distribution, a copy of the Corresponding Source for all the software in the product that is covered by this License, on a durable physical medium customarily used for software interchange, for a price no more than your reasonable cost of physically performing this conveying of source. ⁵⁰; or,
- [b1. Convey the object code in a physical product (including a physical distribution medium), accompanied by a written offer, valid for at least three years and valid for as long as you offer spare parts or customer support for that product model, to provide access to copy the Corresponding Source from a network server at no charge.]⁵¹

⁵⁰Responding to arguments made in several public comments, we have decided to restore the requirement, relaxed in Draft1, that the price of the copy of the Corresponding Source be limited to the reasonable cost of physically performing source distribution.

⁵¹We present for consideration and discussion this proposed new option for providing Corresponding Source by a written offer to make the Corresponding Source available for download from a network server. In the past, downloading was not a convenient option for most users in most circumstances. This is no longer true in many places where broadband net access is common.

Moreover, there are now services that will download material, store it on a CD or DVD, and mail it to the customer for a reasonable price, comparable to the cost of occasionally preparing and mailing a source disk. (For example, we know of one business that charges U.S. \$8.52 to burn and ship a DVD containing between 2GB and 4.7GB of data from

- c. Privately distribute Convey individual copies of the Object Code object code with a copy of the written offer to provide the Corresponding Source. This alternative is allowed only for occasional noncommercial distribution occasionally and noncommercially, and only if you received the Object Code object code with such an offer, in accord with Subsection b above subsection 6b or 6b1.⁵² Or,
- d. Distribute Convey the Object Code object code by offering access to copy it from a designated place, and offer equivalent access to copy the Corresponding Source in the same way through the same place at no extra charge.⁵³ You need not require recipients to copy the Corresponding Source along with the Object Code object code.
 - [If the place to copy the Object Code object code is a network server, the Corresponding Source may be on a different server that supports equivalent copying facilities, provided you have explicitly arranged with the operator of that server to keep the Corresponding Source available for as long as needed to satisfy these requirements, and provided you maintain clear directions next to the Object Code object code saying where to find the Corresponding Source.]
- e. Convey the object code using peer-to-peer transmission provided you know that, and inform other peers where, the object code and Corresponding Source of the work are being offered to the general public at no charge under subsection $6d.^{54}$

Distribution of the **The** Corresponding Source **conveyed** in accord with this section must be in a format that is publicly documented, unencumbered by patents, with an implementation available to the public in source **code form**, ⁵⁵ and must require no special password or key for unpacking,

the U.S. to any country outside the U.S.) The availability of such services suggests that option 6b1 will be no worse than option 6b, even for users in countries where access to broadband is uncommon.

⁵²We have revised the wording of this option for clarity. The subsection is meant to facilitate personal, noncommercial sharing of copies between individuals.

⁵³We now specify what we believe was previously implicit: if binaries are offered for download from a network server, the Corresponding Source made available through the network server in accord with this subsection must be offered at no extra charge.

⁵⁴See Opinion on BitTorrent Propagation.

 $^{^{55}}$ Our primary objective here was to ensure that the distributor use a generally-recognized mechanism for packaging source code. However, many read the requirement

reading or copying.

The Corresponding Source may include portions which do not formally state this License as their license, but qualify under section 7 for inclusion in a work under this License. 56

A separable portion of the object code, whose source code is excluded from the Corresponding Source as a System Library, need not be included in conveying the object code work.⁵⁷

7. License Compatibility Additional Terms.⁵⁸

When you release a work based on the Program, you may include your own terms covering added parts for which you have, or can give, appropriate copyright permission, as long as those terms clearly permit all the activities that this License permits, or permit usage or relicensing under this License. Your terms may be written separately or may be this License plus additional written permission. If you so license your own added parts, those parts may be used separately under your terms, but the entire work remains under this License. Those who copy the work, or works based on it, must preserve your terms just as they must preserve this License, as long as any substantial portion of the parts they apply to are present.

You may have received the Program,⁵⁹ or parts of it, under terms that supplement the terms of this License. These additional terms may include additional permissions, as provided in subsection 7a, and additional requirements, as provided in subsection 7b. When you convey copies of a covered work, unless the work also permits use under a previous version of this License, it

that the distribution format be "unencumbered by patents" as creating a duty to investigate third-party patents. In Draft2, as with the clause in the system library exception (now the definition of System Libraries) concerning standard implementations, we have removed the reference to patents and instead require the public availability of an implementation in source code form.

 $^{^{56}}$ We have moved this sentence to the definition of Corresponding Source in section 1.

⁵⁷We made this change, taking advantage of the definition of System Libraries, to make explicit what has been implicit: that the object code distribution of a GPL-covered work does not imply responsibility to distribute any System Library on which the work depends.

⁵⁸As we explain in the Opinion on Additional Terms, we have extensively rewritten section 7. We changed the section title because license compatibility as it is conventionally understood is only one of several aspects of the issue of placement of additional terms on a GPL-covered program.

⁵⁹In Draft1 section 7 did not directly address the possibility of additional terms being placed on the entire Program by the original author. See Opinion on Additional Terms.

must list, in one central place in the source code, the complete set of additional terms governing all or part of the work.⁶⁰

a. Additional Permissions.

Additional permissions make exceptions from one or more of the requirements of this License.⁶¹ A license document containing a clause that permits relicensing or conveying under this License shall be treated as a list of additional permissions, provided that the license document makes clear that no requirement in it survives such relicensing or conveying.⁶²

Any additional permissions that are applicable to the entire Program are treated as though they were included in this License, as exceptions to its conditions, to the extent that they are valid under applicable law. If additional permissions apply only to part of the Program, that part may be used separately under those permissions, but the entire Program remains governed by this License without regard to the additional terms.⁶³

Aside from additional permissions, your terms may add limited kinds of additional requirements on your added parts, as follows:

⁶⁰This is a restatement of the central list requirement, along with the exception for "version 2 or later" works, that was previously placed at the end of section 7. It recognizes that additional terms may cover the whole work as well as parts of it.

⁶¹We offer version 3 of the GNU LGPL as a model for the use of additional permissions as exceptions from requirements of the GPL.

⁶²Free software licenses that are nominally permissive and non-copyleft either are assumed to contain an implied relicensing clause or expressly permit distribution "under another license." Some of these licenses, however, fail to make clear whether all of their requirements are extinguished by the relicensing clause, or whether some of the requirements continue to burden downstream users of code that is nominally distributed under the terms of some other license.

We address this problem in subsection 7a. A formal license containing a relicensing clause is automatically compatible with GPLv3, as though that formal license contained no additional requirements, but only if that license makes clear that the relicensing clause extinguishes all additional requirements in it. Otherwise, the relicensing clause is ignored for purposes of analyzing compatibility with GPLv3; each additional requirement must be considered to determine whether it falls within the list of allowed additional requirements given in subsection 7b.

⁶³The second sentence of this paragraph restates more clearly what was stated in the first paragraph of Draft1 section 7. The first sentence of this paragraph is new; it describes the effect of an additional permission that applies to the whole work.

b. Additional Requirements.

Additional requirements are terms that further constrain use, modification or propagation of covered works. This License affects only the procedure for enforcing additional requirements, and does not assert that they can be successfully enforced by the copyright holder.⁶⁴ Only these kinds of additional requirements are allowed by this License:⁶⁵

- 0) a) They may terms that require the preservation of certain copyright notices, other specified reasonable legal notices, and/or or author attributions;; or
- 1) and may terms that require that the origin of the parts material they cover not be misrepresented, and/or or that altered modified versions of them that material be marked in the source code, or marked there in specific reasonable ways, as different from the original version; or
- 2) b) They may state a disclaimer of warranty and or liability disclaimers in terms different that differ from those used the disclaimers in this License.; or
- 3) e) They may terms that prohibit or limit the use for publicity purposes of specified names of contributors licensors or authors, 66 and they may or that require that certain specified trade names, trademarks, or service marks not be used for publicity purposes without express permission, other than only in the ways that are fair use under applicable trademark law; except with express permission. or
- 4) d) They may terms that require, that the work contain functioning facilities that allow if a modified version of the material they cover is a work intended to interact with users through a computer network, that those users be able to immediately obtain copies of its the Complete Corresponding Source Code. of the

 $^{^{64}}$ We require enforcement of additional requirements to be by the procedure given in section 8.

⁶⁵We have rewritten the list of allowed additional requirements for clarity, and we have added a catchall requirement category.

⁶⁶ "Contributor" is a term defined in several other free software licenses, but not used in our licenses. We replace it here with the equivalent terms of art "licensor" and "author."

work through the same network session;⁶⁷ or

- 5) e) They may impose software patent retaliation, which means terms that wholly or partially terminate, or allow termination of, permission for use of your added parts terminates or may be terminated, wholly or partially, under stated conditions, the material they cover, for users closely related to any party that has filed a user who files a software patent lawsuit (i.e.that is, a lawsuit alleging that some software infringes a patent). not filed in retaliation or defense against the earlier filing of another software patent lawsuit, or in which the allegedly infringing software includes some of the covered material, possibly in combination with other software; or The conditions must limit retaliation to a subset of these two cases: 1. Lawsuits that lack the justification of retaliating against other software patent lawsuits that lack such justification. 2. Lawsuits that target part of this work, or other code that was elsewhere released together with the parts you added, the whole being under the terms used here for those parts.⁶⁸
- 6) terms that are precisely equivalent in type and extent to a requirement expressly stated in this License, or that deny permission for activities that are clearly not permitted, expressly or otherwise, by this License.⁶⁹

No other additional conditions are permitted in your terms; therefore, no other conditions can be present on any work that uses this License. This License does not attempt to enforce your terms, or assert that they are valid or enforceable by you; it simply does not prohibit you from employing them.

All other additional requirements, including attorney's fees provisions, choice of law, forum, and venue clauses, arbitration clauses, mandatory contractual acceptance clauses, requirements

 $^{^{67}}$ We have addressed concerns regarding the phrase "functioning facilities" and the potential applicability of the wording of subsection 7d of Draft1 to modified code not intended for public network use.

⁶⁸The wording of subsection 7e of Draft1, concerning compatible patent retaliation clauses, was particularly difficult for readers to understand. We have entirely rewritten it, without changing any of its substance.

⁶⁹We add this catchall category for other requirements that do not fall neatly into one of the previously listed categories but which, in a sense, are not "additional" because the GPL clearly makes the same requirement, or clearly does not permit what the requirement prohibits. This category might include certain requirements, worded differently from but exactly equivalent to those of the GPL, contained in the terms of other license documents.

regarding changes to the name of the work, and terms that require that conveyed copies be governed by a license other than this License, are prohibited.⁷⁰

c. Terms Added or Removed By You.

When others modify the work, if they modify your parts of it, they may release such parts of their versions under this License without additional permissions, by including notice to that effect, or by deleting the notice that gives specific permissions in addition to this License. Then any broader permissions granted by your terms which are not granted by this License will not apply to their modifications, or to the modified versions of your parts resulting from their modifications. However, the specific requirements of your terms will still apply to whatever was derived from your added parts.

When you convey a copy of a covered work, you may at your option remove any additional permissions from that copy, or from any part of it.⁷¹ Some additional permissions require their own removal in certain cases when you modify the work.⁷²

Additional requirements are allowed only as stated in subsection 7b. If the Program as you received it purports to impose any other additional requirement, you may remove that requirement.⁷³

You may place additional permissions, or additional requirements as allowed by subsection 7b, on material, added by you to a covered work, for which you have or can give appropriate copy-

⁷⁰We now provide a non-exhaustive list of examples of other kinds of conditions that are disallowed additional requirements under the GPL. Questions commonly arise about whether certain of these terms, such as attorney's fees provisions and choice of law clauses, are compatible with the GPL. Some such provisions are typically found in license documents drafted from a contract-oriented perspective; to the drafters or users of these licenses it may not be obvious why we consider them to be requirements in the context of a pure copyright license.

⁷¹We no longer formally require removal of an additional permission to be by one who modifies.

⁷²See, for example, subsection 2b of LGPLv3.

⁷³Unlike additional permissions, additional requirements that are allowed under subsection 7b may not be removed. The revised section 7 makes clear that this condition does not apply to any other additional requirements, however, which are removable just like additional permissions. Here we are particularly concerned about the practice of program authors who purport to license their works under the GPL with an additional requirement that contradicts the terms of the GPL, such as a prohibition on commercial use. Such terms can make the program non-free, and thus contradict the basic purpose of the GNU GPL; but even when the conditions are not fundamentally unethical, adding them in this way invariably makes the rights and obligations of licensees uncertain.

right permission. Adding requirements not allowed by subsection 7b is a violation of this License that may lead to termination of your rights under section 8.

If you add terms to a covered work in accordance with this section, you must place, in the relevant source files, a statement of the additional terms that apply to those files, or a notice indicating where to find the applicable terms.⁷⁴

Unless the work also permits distribution under a previous version of this License, all the other terms included in the work under this section must be listed, together, in a central list in the work.

8.[4] Termination.

You may not propagate, or modify or sublicense⁷⁵ the Program except as expressly provided under this License. Any attempt otherwise to propagate, or modify or sublicense the Program is void, and any copyright holder may terminate your rights under this License at any time after having notified you of the violation by any reasonable means within 60 days of any occurrence. If you violate this License, any copyright holder may put you on notice by notifying you of the violation, by any reasonable means, provided 60 days have not elapsed since the last violation. Having put you on notice, the copyright holder may then terminate your license at any time. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as they remain in full compliance.

⁷⁴The version of section 7 in Draft1 required additional terms to be in writing. The final paragraph of section 7 in Draft2 states in further detail how the written notice of applicable additional terms must be provided.

⁷⁵Because sublicensing is now expressly prohibited under section 2, section 8 need not refer to it.

 $^{^{76}}$ We have rephrased the non-automatic termination procedure to make it easier to understand.

9.[5] Not a Contract Acceptance Not Required for Having Copies.⁷⁷

You are not required to accept this License in order to receive or run⁷⁸ a copy of the Program. Ancillary propagation of a covered work occurring solely as a consequence of using peer-to-peer transmission to receive a copy likewise does not require acceptance. However, nothing else grants you permission to propagate or modify the Program or any covered works. These actions infringe copyright if you do not accept this License. Therefore, by modifying or propagating the Program (or any covered work), you indicate your acceptance of this License to do so, and all its terms and conditions.

10.[6] Automatic Licensing of Downstream Users.

Each time you redistribute convey a covered work, the recipient automatically receives a license from the original licensors, to propagate and run, modify and propagate that work, subject to this License, including any additional terms introduced through section 7. You may not impose any further restrictions on the recipients' exercise of the rights thus granted or affirmed, except (when modifying the work) in the limited ways permitted by section 7. Therefore, you may not impose a license fee, royalty, or other charge for exercise of rights granted under this License.⁸⁰

⁷⁷We received a number of forceful objections to the title of section 9 of Draft1, principally from lawyers. This surprised us, since our section titles were not intended to have legal significance, and, moreover, the content of section 9 was essentially unchanged from section 5 of GPLv2. We have changed the title of section 9 to one that summarizes the first sentence of the section.

Section 9 means what it says: mere receipt or execution of code neither requires nor signifies contractual acceptance under the GPL. Speaking more broadly, we have intentionally structured our license as a unilateral grant of copyright permissions, the basic operation of which exists outside of any law of contract. Whether and when a contractual relationship is formed between licensor and licensee under local law do not necessarily matter to the working of the license.

⁷⁸The GPL makes no condition on execution of the Program, as section 2 affirms, just as it makes no condition on receipt of the Program.

⁷⁹See Opinion on BitTorrent Propagation.

⁸⁰Draft1 removed the words "at no charge" from what is now subsection 5b, the core copyleft provision, for reasons related to our current changes to the second paragraph of section 4: it had contributed to a misconception that the GPL did not permit charging for distribution of copies. The purpose of the "at no charge" wording was to prevent attempts to collect royalties from third parties. The removal of these words created the danger that

You are not responsible for enforcing compliance by third parties to this License.

If propagation results from a transaction transferring control of an organization, each party to that transaction who receives a copy of the work also receives a license and a right to possession of the Corresponding Source of the work from the party's predecessor in interest.⁸¹

11. Licensing of Patents.⁸²

When you distribute a covered work, you grant a patent license⁸³ to the

the imposition of licensing fees would no longer be seen as a license violation.

We therefore have added a new explicit prohibition on imposition of licensing fees or royalties in section 10. This section is an appropriate place for such a clause, since it is a specific consequence of the general requirement that no further restrictions be imposed on downstream recipients of GPL-covered code.

⁸¹The parties in mergers and acquisitions of businesses place a premium on reduction of uncertainty regarding the rights and liabilities being transferred. This is, of course, true of transactions involving businesses with assets that include GPL-covered software. There appears to be particular concern about whether and when such transactions activate the distribution-related requirements of the GPL for software that previously has been used and modified internally. With such concerns in mind, some members of our discussion committees have proposed that we allow assignment of the GPL, while others have suggested complex changes to the definition of propagation or licensee.

For our part, we agree entirely that the GPL should not create obstacles in corporate control transactions, but we do have concerns about the clever structuring of transactions specifically to avoid the consequences of the GPL. As one example, a business that uses certain GPL-covered software internally may seek to sell a division but keep control of a trade secret embodied in its improvements to that software. In such a case, the business might attempt to keep the source code for itself and give only the binary to the buyer. This, we believe, should not be allowed.

In Draft2 we have addressed these issues not by altering definitions of terms or allowing assignment, both of which we believe might have undesirable consequences, but by treating control transactions as a special case to be handled by automatic licensing. Under the new second paragraph of section 10, a party to a control transaction who receives any part or form of a GPL-covered work automatically receives, in addition to all upstream licenses in the chain of propagation, a license and a right to possession of the Corresponding Source from the predecessor in interest.

⁸²We removed the reference to "licensing" in the title of this section. Section 11 is no longer concerned solely with granting of and distribution under patent licenses. We have replaced the express patent license grant with a covenant not to assert patent claims, and the new paragraph on reservation of implied rights is not limited to implied patent licenses.

⁸³The patent license grant of Draft1 is replaced in Draft2 with a covenant not to assert patent claims. See n. 87 and Opinion on Covenant Not to Assert Patent Claims.

recipient, and to anyone that receives any version of the work, permitting, for any and all versions of the covered work, all activities allowed or contemplated by this License, such as installing, running and distributing versions of the work, and using their output. This patent license is nonexclusive, royalty-free and worldwide, and covers all patent claims you control or have the right to sublicense, at the time you distribute the covered work or in the future, that would be infringed or violated by the covered work or any reasonably contemplated use of the covered work.

You receive the Program with a covenant from each author and conveyor of the Program, and of any material, conveyed under this License, on which the Program is based, that the covenanting party will not assert (or cause others to assert) any of the party's essential patent claims in the material that the party conveyed, against you, arising from your exercise of rights under this License. If you convey a covered work, you similarly covenant to all recipients, including recipients of works based on the covered work, not to assert any of your essential patent claims in the covered work.⁸⁷

If you distribute convey a covered work, knowingly relying on a non-sublicensable patent license that is not generally available to all, 88 you must either (1) act to shield downstream users against the possible patent infringement claims from which your license protects you, or (2) ensure that anyone can copy the Corresponding Source of the

⁸⁴In the corresponding wording of the covenant not to assert we refer simply to "your exercise of rights under this License."

⁸⁵These qualifications are unnecessary when the formalism of a patent license is replaced with a covenant, as it is here, or with a warranty.

⁸⁶The last part of the last sentence of the express patent license is replaced, in the covenant not to assert, by the reference to essential patent claims, defined in section 0.

⁸⁷As we explain further in the Opinion on Covenant Not to Assert Patents, we have redrafted the express patent license of Draft1 as a covenant not to assert patent claims. We believe that the new wording, which makes use of the defined terms "essential patent claims" and "based on," is simpler and clearer than the wording of the patent license, and is responsive to the extensive commentary on the express patent license that we received from the public and the discussion committees.

In Draft1, no express patent license was given by the author of the Program. Under the covenant of Draft2, however, the original licensor undertakes to make the same covenant as any other subsequent conveyor. It is primarily for this reason that the covenant is structured in two parts (specifying the rights of the licensee as covenantee, and the obligations of the licensee as covenantor).

⁸⁸If patent licenses are sublicensable or generally available to all, they do not give rise to the problem of shifting risk of patent infringement liability downstream, which this paragraph is intended to target.

covered work, free of charge and under the terms of this License, through a publicly-available network server or other readily accessible means.⁸⁹

Nothing in this License shall be construed as excluding or limiting any implied license or other defenses to infringement that may otherwise be available to you under applicable patent law.⁹⁰

12.[7] Liberty or Death for the Program No Surrender of Others' Freedom.⁹¹

If conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute convey the Program, or other covered work, so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute convey it at all. For example, if you accept a patent license would not permit that prohibits royalty-free redistribution conveying by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution conveying the Program. 92

⁸⁹After gathering opinion on the second paragraph of section 11 during the discussion process, we decided to offer a specific form of shielding that would satisfy the objectives of the paragraph. A distributor of a covered work under benefit of a patent license can ensure that the Corresponding Source is made publicly available, free of charge, for all to access and copy, such as by arranging for the Corresponding Source to be available on a public network server. We keep the more general shielding requirement as an option because we do not wish to insist upon public distribution of source code. Distributors complying with this section may prefer to provide other means of shielding their downstream recipients.

⁹⁰Without this provision, it might be argued that any implied patent licenses or other patent infringement defenses otherwise available by operation of law are extinguished by, for example, the express covenant not to assert. We consider it important to preserve these rights and defenses for users to the extent possible. Moreover, the availability of implied licenses or similar rights may be necessary in order for certain kinds of shielding under the second paragraph to be effective.

⁹¹We have replaced the title of this section with one that more closely reflects its purpose and effect, which is to prevent distribution that operates to give recipients less than the full set of freedoms that the GPL promises them. The previous title was not entirely accurate, in that the program is not necessarily "dead" if an attempt to distribute by one party under a particular set of circumstances activates the section. The program may remain free for other users facing other circumstances.

⁹²The example given here is reworded slightly to make it clearer that it is acceptance of the patent license (a self-imposition of conditions) that activates the section, and that the

It is not the purpose of this section to induce you to infringe any patents or other exclusive rights or to contest their legal validity. The sole purpose of this section is to protect the integrity of the free software distribution system. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.⁹³

[13.[8] Geographical Limitations.

If the distribution conveying and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation on conveying, excluding those countries, so that distribution conveying is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.]

14.[9] Revised Versions of this License.

The Free Software Foundation may publish revised and/or new versions of the GNU General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies that a certain numbered version of this License "or any later version" applies to it, you have the option of following the terms and conditions either of that numbered version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

effective terms of the patent license must actually prohibit exercise of GPL freedoms by downstream recipients. A distributor who accepts a patent license that does not activate this section may nonetheless be required to comply with the second paragraph of section 11

 $^{^{93}}$ This paragraph provides a statement of purpose but does not contain a substantive term or condition. Our experience with GPLv2 convinces us that it is no longer necessary, if indeed it ever was.

[15.[10] Requesting Exceptions.⁹⁴

If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different under other licenses, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.]

NO WARRANTY

16.[11] Disclaimer of Warranty.⁹⁵

There is no warranty for the Program, to the extent permitted by applicable law. Except when otherwise stated in writing the copyright holders and/or other parties provide the Program "as is" without warranty of any kind, either expressed or implied, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose. The entire risk as to the quality and performance of the Program is with you. Should the Program prove defective, you assume the cost of all necessary servicing, repair or correction.

17.[12] Limitation of Liability. 96

In no event unless required by applicable law or agreed to in writing will any copyright holder, or any other party who may modify and/or redistribute convey the Program as permitted above, be liable to you for damages, including any general, special, incidental or consequential damages arising out of the use or inability to use the Program (including but not limited to loss of data or data being rendered inaccurate or losses sustained by you or third parties or a failure of the Program to operate with any other programs),

⁹⁴We have bracketed section 15 for possible removal from the final version of GPLv3. Though this section has value in teaching users that authors may grant permissive exceptions to the strong copyleft of the GPL, we now provide a framework for such exceptions within the license, in section 7. Section 15 is, in a sense, a provision that exists outside the terms of the GPL (it is neither a permission nor a requirement). It may be more appropriate to transfer it to a FAQ or other educational document.

⁹⁵We added a descriptive title for this section.

 $^{^{96}}$ We added a descriptive title for this section.

even if such holder or other party has been advised of the possibility of such damages.

18.97

Unless specifically stated, the Program has not been tested for use in safety critical systems.

END OF TERMS AND CONDITIONS⁹⁸

⁹⁷We added the new disclaimer of section 18 assuming that it would be welcomed by developers and distributors of safety-critical free software. The reaction to section 18 from this constituency has instead generally been negative. Companies involved in distributing safety-critical applications have recommended that we remove the disclaimer, pointing out that it may be preferable to rely on the general warranty and liability disclaimers of sections 16 and 17 in the usual case and to add a special disclaimer under section 7 when appropriate. In light of these comments, we have decided to remove section 18 from the GPLv3 draft.

⁹⁸We have removed from this draft the appended section on "How to Apply These Terms to Your New Programs." For brevity, the license document can instead refer to a web page containing these instructions as a separate document.

Exhibit D

Expert Report of Bradley M. Kuhn 22 December 2022

"Additional Terms Opinion" as published by the FSF on 2008-08-03.

Opinion on Additional Terms

Introduction

The wording of section 7 in Draft 1 proved difficult for many readers to understand. In Draft 2 section 7 has been entirely rewritten and bears a new title that more accurately reflects its scope. The new section 7 is longer than the first version, but it is no less concise; it now explicitly addresses certain issues regarding the presence and validity of additional terms that were not covered in the first version. It is meant to be clear, comprehensible, and comprehensive. Because most of the comments we received on section 7 were, in effect, questions about its meaning and interpretation, we use this opinion to explain how section 7 provides a framework for the analysis and treatment of additional terms under the GPL.

The GPL is a statement of permissions, some of which have conditions. Additional terms, terms that supplement those of the GPL, may come to be placed on, or removed from, GPL-covered code in certain common ways. We consider those added terms "additional permissions" if they grant exceptions from the conditions of the GPL, and "additional requirements" if they add conditions to the basic permissions of the GPL. The treatment of additional permissions and additional requirements under GPLv3 is necessarily asymmetrical, because they do not raise the same ethical and interpretive issues; in particular, additional requirements, if allowed without careful limitation, could transform a GPL'd program into a non-free one. With these principles in the background, section 7 answers the following questions: (1) How do the presence of additional terms on all or part of a GPL'd program affect users' rights? (2) When and how may a licensee add terms to code being distributed under the GPL? (3) When may a licensee remove additional terms?

Additional Permissions

Additional permissions present the easier case. We have licensed some of our own software under GPLv2 with permissive exceptions that allow combination with non-free code, and that allow removal of those permissions by downstream recipients; similarly, LGPLv2.1 is in essence a permissive variant of GPLv2, and it permits relicensing under the GPL. We have generalized these practices in section 7. A licensee may remove any additional permission from a covered work, whether it was placed by the original author or by an upstream distributor. A licensee may also add any kind of additional permission to any part of a work for which the licensee has, or

can give, appropriate copyright permission. For example, if the licensee has written that part, the licensee is the copyright holder for that part and can therefore give additional permissions that are applicable to it. Alternatively, the part may have been written by someone else and licensed, with the additional permissions, to that licensee. Any additional permissions on that part are, in turn, removable by downstream recipients. As subsection 7a explains, the effect of an additional permission depends on whether the permission applies to the whole work or a part.

We have drafted version 3 of the GNU LGPL, which we have released with Draft 2 of GPLv3, as a simple list of additional permissions supplementing the terms of GPLv3. Section 7 has thus provided the basis for recasting a formally complex license as an elegant set of added terms, without changing any of the fundamental features of the existing LGPL. We offer this draft of LGPLv3 as as a model for developers wishing to license their works under the GPL with permissive exceptions. The removability of additional permissions under section 7 does not alter any existing behavior of the LGPL; the LGPL has always allowed relicensing under the ordinary GPL.

Additional Requirements and License Compatibility

We broadened the title of section 7 because license compatibility, as it is conventionally understood, is only one of several facets of the placement of additional terms on GPL'd code. The license compatibility issue arises for three reasons. First, the GPL is a strong copyleft license, requiring modified versions to be distributed under the GPL. Second, the GPL states that no further restrictions may be placed on the rights of recipients. Third, all other free software licenses in common use contain certain requirements, many of which are not conditions made by the GPL. Thus, when GPL'd code is modified by combination with code covered by another formal license that specifies other requirements, and that modified code is then distributed to others, the freedom of recipients may be burdened by additional requirements in violation of the GPL. It can be seen that additional permissions in other licenses do not raise any problems of license compatibility.

Section 7 relaxes the prohibition on further restrictions slightly by enumerating, in subsection 7b, a limited list of categories of additional requirements that may be placed on code without violating GPLv3. The list includes the items that were listed in Draft 1, though rewritten for clarity. It also includes a new catchall category for terms that might not obviously fall within one of the other categories but which are precisely equivalent

to GPLv3 conditions, or which deny permission for activities clearly not permitted by GPLv3. We have carefully considered but rejected proposals to expand this list further. We have also rejected suggestions, made by some discussion committee members, that the Affero clause requirement (7d in Draft 1 and 7b4 in Draft 2) be removed, though we have revised it in response to certain comments. We are unwavering in our view that the Affero requirement is a legitimate one, and we are committed to achieving compatibility of the Affero GPL with GPLv3.

A GPL licensee may place an additional requirement on code for which the licensee has or can give appropriate copyright permission, but only if that requirement falls within the list given in subsection 7b. Placement of any other kind of additional requirement continues to be a violation of the license. Additional requirements that are in the 7b list may not be removed, but if a user receives GPL'd code that purports to include an additional requirement not in the 7b list, the user may remove that requirement. Here we were particularly concerned to address the problem of program authors who purport to license their works in a misleading and possibly self-contradictory fashion, using the GPL together with unacceptable added restrictions that would make those works non-free software.

Section 7 points out that GPLv3 itself makes no assertion that an additional requirement is enforceable by the copyright holder. However, section 7 makes clear that enforcement of such requirements is expected to be by the termination procedure given in section 8 of GPLv3.

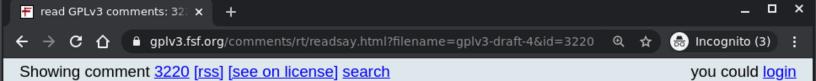
Conclusion

Some have questioned whether section 7 is needed, and some have suggested that it creates complexity that did not previously exist. We point out to those readers that there is already GPLv2-licensed code that carries additional terms. One of the objectives of section 7 is to rationalize existing practices of program authors and modifiers by setting clear guidelines regarding the removal and addition of such terms. With its carefully limited list of allowed additional requirements, section 7 accomplishes additional objectives, permitting the expansion of the base of code available for GPL developers, while also encouraging useful experimentation with requirements we do not include in the GPL itself.

Exhibit E

Expert Report of Bradley M. Kuhn 22 December 2022

Comment number 3,320 on in the GPLv3 Process by user "frx".





DISABLES ADDITIONAL ACTIONS FOR DRAFTERS

Comment 3220: Good: further restrictions are void

Regarding the text: "If the Program as you received it, or any part of it, purports to be governed by this License, supplemented by a term that is a further restriction, you may remove that term"

In section: gpl3.licensecompat.p8.s2
Submitted by: frx on 2007-06-02 at 12:01 EDT

0 agree:

noted by frx on 2007-06-02 at 12:01 EDT:

I'm glad to see that this is explicitly stated: every attempt to license a work under the terms of GPLv3 with further restrictions is equivalent to licensing under the plain GPLv3. This is good, since there are unfortunately many people that license works in inconsistent manners (such as GPLv2 + additional restrictions); creating a rule that resolves this kind of inconsistencies for the better is a good thing to do.

Exhibit F

Expert Report of Bradley M. Kuhn 22 December 2022

The third discussion draft of the GPLv3, as published by the FSF on 2007-03-28.

GPLv3 Third Discussion Draft Markup of Changes from Second Discussion Draft

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Discussion Draft 2 3 of Version 3, 27 July 28 March 2006 2007

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Expert Report of Bradley M. Kuhn 22 December 2022

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Exhibit H

Expert Report of Bradley M. Kuhn 22 December 2022

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Exhibit I

Expert Report of Bradley M. Kuhn 22 December 2022

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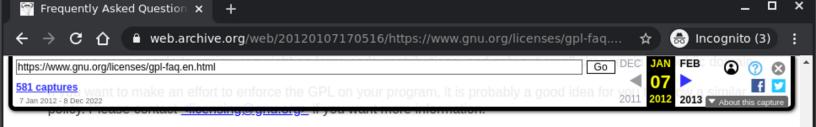
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Exhibit K

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Q



Server Side Public License (SSPL)

- Frequently Asked Questions about the Server Side Public License (SSPL)
- Comparison of GNU Affero General Public License v3 to SSPL

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VERSION 1, OCTOBER 16, 2018

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