

How open is open? Microsoft's Shared Source Initiative as an Alternative to Open Source Software

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Introduction: "Judging a Book by its Cover"

There are few certainties in life: everybody is playing football but, in the end, Germany wins. The murderer is always the butler. Or the gardener. It never rains in "Midsomer Murders". Until recently, one of these used to be "Open Source good, Microsoft bad." But now, it would appear that times have, indeed, changed and nothing in the software industry is as perceived and traditional wisdom would have it: Microsoft is opening up some of its source code.

Over the past few years, Microsoft has promoted a project called "Shared Source Initiative" which allows access to source code to certain customers (e.g. research institutions and independent software vendors) on a restricted basis. Furthermore, it has also introduced some licenses which appear to give unrestricted access to source code and seem to closely resemble 'traditional' Open Source licenses. Given that availability of source code is a prime characteristic of Open Source Software it could be argued that Microsoft has embraced the Open Source Software philosophy. And indeed, one of Microsoft's sharpest critics, Lawrence Lessig, is openly praising Microsoft for its Shared Source Initiative for opening up some of their source code.¹ Rumour also has it that Microsoft has at least been thinking about submitting some of their licenses to the Open Source Initiative for certification.² Does this mean that Microsoft has (finally) seen the light and embraced the Open Source philosophy?

If Open Source Software was only defined by the accessibility of source code, the availability of source code would equal open source. Hence it would appear that Microsoft's Shared Source Initiative is more than just another attempt to appease consumers and/or critics in terms of software transparency. In fact, in view of such a limited definition, Microsoft could be considered an Open Source Software developer itself. However, while such a definition of Open Source Software is accurately inclusive (i.e. all Open Source Software has freely accessible source code), it is not accurately exclusive as not all products with available source code are Open Source Software.³ This paper analyses Microsoft's Shared Source Initiative and compares it with the prerequisites/ characteristics of Open Source Software: in doing so, a brief outline of Microsoft's Shared Source Initiative will be given. This is followed by a close examination of Microsoft's apparent Open Source licenses, i. e. these licenses are analysed with regard to the ten essential requirements of the Open Source definition. Subsequently, this result is put into the broader picture of Microsoft's nature as an intellectual property company. This paper concludes that, unfortunately, Microsoft has yet to see the light.

Microsoft's Shared Source Initiative

Microsoft describes its Shared Source Initiative as follows:

"Through the Shared Source Initiative, Microsoft® is sharing source code with customers, partners, and governments worldwide. The Shared Source Initiative encompasses the spectrum of programs and licenses offered by Microsoft to various communities of customers, partners, developers, and other interested individuals."⁴

¹ Lawrence Lessig, bravo Microsoft, at: <http://www.lessig.org/blog/archives/003188.shtml> (27/02/2007).

² Peter Galli, Microsoft: No Near-Term Plans to Seek Open-Source Licensing Approval, at: <http://www.eweek.com/article2/0,1759,1873559,00.asp>

³ Feller/Fitzgerald, Understanding Open Source Software Development, p. 62.

⁴ <http://www.microsoft.com/resources/sharedsource/Initiative/Initiative.aspx> (27/03/2007).

Thus it becomes clear that this initiative is not *one* license; rather, it is an umbrella program for all source sharing licenses from Microsoft. Under this umbrella, Microsoft has introduced numerous licenses which vary in scope and terms but only three of these Shared Source licenses are of interest in relation to the open source definition: the Microsoft Permissive License, Microsoft Community License and the Microsoft Reference License. These licenses do not apply to all Microsoft software programs; they only form part of a bigger initiative. From a commercial/business customer's point of view however, these licenses fulfill nearly if not all basic requisites of the Open Source definition⁵ as all of the above licenses make Microsoft source code 'openly' available and apparently with no strings attached.

In a nutshell, the requirements of the Open Source definition can be summarised as follows:⁶

- Licensees are free to use open source software for any purpose whatsoever.
- Licensees are free to make copies of open source software and to distribute them without payment of royalties to a licensor.
- Licensees are free to create derivative works of open source software and to distribute them without payment of royalties to a licensor.
- Licensees are free to access and use the source code of open source software.
- Licensees are free to combine open source and other software.

However, though from an average user's perspective the question of the source code's availability is probably rather a case of "I'd much rather have the code of the software than not have the code of it.", there is more to the Open Source definition than meets the eye at first glance and, most importantly, that has to be met by the licenses in question before they and their accompanying software can be considered truly 'open'. It is therefore necessary to examine the licenses in more detail in order to determine their compatibility with the Open Source definition.

Microsoft Reference License

The Microsoft Reference License,⁷ like the other two licenses in question, is a rather short document, merely comprising an A4 page. Notwithstanding its relative shortness, it contains some provisions which are of interest in relation to the Open Source definition. And an even more interesting fact is that the text of this license has changed recently; until March 2007, the Microsoft Reference License contained the following provision under point 2:

"(A) Copyright Grant – Subject to the terms of this license, the Licensor grants you a non-transferable, non-exclusive, worldwide, royalty-free copyright license to reproduce the software and reference it for internal use.

(B) Patent Grant – subject to the terms of this license, the Licensor grants you a non-transferable, non-exclusive, worldwide, royalty-free patent license under licensed patents to use the software within your company."

This provision clearly related to the freedom of redistribution, i.e. that the license shall not restrict any party from selling or giving away the software as a component of an aggregate software distribution containing programs from several different sources. And it is also clear that this freedom was negated by the provision in question as "internal use" was defined in point 1 as the use within the licensee's company and specifically excluded the right to distribute the software outside said company.

Furthermore, point 3 (B) of the former version of the Microsoft Reference License also negated the requirement that an open source compliant license must be technology neutral, i.e. no provision of the license may be predicated on any individual technology or style of interface:

"Platform Limitation – The licenses granted in section 2 extend only to the software or larger works that you create that run on a Windows operating system product."

Given that such a provision obviously discriminated against non-Windows platforms, it was therefore not conformant with the Open Source definition which demands openness towards all possible platforms. Hence, in its former version, the Microsoft Reference License was not an Open Source License.

⁵ Full text at: <http://www.opensource.org/docs/osd> (27/03/2007).

⁶ Rosen, Open Source Licensing, pp. 9-11.

⁷ Full text at: <http://www.microsoft.com/resources/sharedsource/licensingbasics/referencelicense.mspx> (29/03/2007).

In its current version, the ‘discriminating’ provision has been completely removed from the license text and, therefore, one might assume that the essence of the Microsoft Reference License would also have changed. However, any expectation in this regard is disappointed by point 2 of the new license:

“(A) Copyright Grant – Subject to the terms of the license, the Licensor grants you a non-transferable, non-exclusive, worldwide, royalty-free copyright license to reproduce the software for reference use.

(B) Patent Grant – Subject to the terms of the license, the Licensor grants you a non-transferable, non-exclusive, worldwide, royalty-free patent license under licensed patents for reference use.”

As can be seen, the license text has only changed slightly from “internal use” to “reference use”. Unfortunately, this change is neither for the better nor does it re-affirm the former version’s meaning of “internal use”. On the contrary, Microsoft has narrowed this license even further – and that without a platform limitation clause:

“‘Reference use’ means use of the software within your company as a reference, in read only form, for the sole purpose of debugging your products, maintaining your products, or enhancing the interoperability of your products with the software, and specifically excludes the right to distribute the software outside of your company.”⁸

It is therefore no surprise that the Microsoft Reference License still does not fulfill the Open Source definition and software released under this license can not be regarded as Open Source, even if the source code may be ‘openly’ available. Moreover, the license has to be considered a “look but don’t touch” license which puts the Open Source definition almost ad absurdum. Besides, from the perspective of the Open Source movement, this license might even be considered “hazardous” because viewing any of the Microsoft source code released under this license might constitute grounds for a later claim of copyright violation if similar code appears in any Open Source product.⁹ This impression is now even more pressing with the change as the current version of the license appears to be even less ‘open’ than before.

Microsoft Community License

At first glance, the Microsoft Community License¹⁰ appears to be less restrictive than the Microsoft Reference License. In particular, this license does not contain provisions equivalent to those of former or current versions of the Microsoft Reference License and thus does not discriminate against other platforms nor does it prevent the redistribution of source code governed by this license. According to Microsoft, this license is best used for collaborative development projects, i.e. where software developers design a larger work not as one monolithic piece of code but as a series of separate files that communicate with each other at runtime on the end user’s computer. Each of these files is subject to the Microsoft Community License if this file contains source code which originally had been released under this license. In relation to the Open Source definition, the most interesting provision is point 3(A) of the Microsoft Community License:

“Reciprocal Grants – For any file you distribute that contains code from the software (in source code or binary format), you must provide recipients the source code to that file along with a copy of this license, which license will govern that file. You may license other files that are entirely your own work and do not contain code from the software under any terms you choose.”

Insofar the Microsoft Community License operates in the same way as the Mozilla Public License, meaning that if you create and distribute modifications to one of the files containing original code or previous modifications of the original code, or create or distribute a new file containing original code or previous modifications, those modifications must be released as modifications under the same license¹¹ – in this case the Microsoft Community License. And as under the terms of the Mozilla Public License, the Microsoft Community License provides that for files which do not contain source code governed by the Microsoft Community License, the developer is free to choose the terms under which he wants to license these un-affected and/or unmodified files.

⁸ This definition is contained in point 1 of the Microsoft Reference License.

⁹ Feller/Fitzgerald, Understanding Open Source Software Development, p. 63.

¹⁰ Full text at: <http://www.microsoft.com/resources/sharedsource/licensingbasics/community/license.mspx> (29/03/2007).

¹¹ See for more information on the MPL: Rosen, Open Source Licensing, pp. 141-160.

However, it is not just this strong resemblance with one major term of the Mozilla Public License – a certified Open Source license – which makes this license apparently compliant with the Open Source definition. Moreover, the other conditions contained in the Microsoft Community License appear also to fulfill the ten essential requirements of the Open Source definition: there are neither restrictions in relation to access, use, modification and redistribution of source code nor restrictions in relation to platforms, purposes or groups of users. Thus, as much as this might pain the most engrained critics of Microsoft in the Open Source community, it would seem that Microsoft has (at least partially) seen the light and embraced the Open Source philosophy.

Microsoft Permissive License

If one likes it or not, this finding is supported by an analysis of the Microsoft Permissive License¹² which, in Microsoft's own words, is the least restrictive of the Microsoft source code licenses. In principle, this license contains exactly the same terms as the Microsoft Community License but without the provision regarding the 'reciprocal grants'. This makes the Microsoft Permissive License even more open than Microsoft Community License (if such a thing is, indeed, possible) as it brings the license into line with the mother of all Open Source licenses, the General Public License.¹³ Like the GPL, the Microsoft Permissive License does neither restrict the modification and/or the redistribution of the source code or parts of it nor is there an obligation to publish any such modification. However, if the developer chooses to publish modifications of the source code, he is obliged to distribute these changes under the Microsoft Permissive License of which a complete copy has to be included; this provision is also mirrored in the GPL under point 2. Something similar applies when the developer chooses to publish the modifications either in compiled or object code format: according to point 3(D), sentence 2 of the Microsoft Permissive License, the developer is only allowed to do so under a license that is compliant with the Microsoft Permissive License; thus, it is ensured that the source code is available to anyone wishing to access and use it.¹⁴

Hence it would appear that, with regard to some software programs, Microsoft has really and truly embraced the Open Source philosophy – and seemingly not by means of the “embrace and extend” approach as previously feared but by means of a wholehearted and true hug.

Microsoft goes Open Source?

But can Microsoft really be joining the very movement it has been attacking for years and by doing so basically undermining the foundations on which the company has been built? After all, Microsoft officials have described Open Source as an intellectual property destroyer,¹⁵ as a cancer that attaches itself in an intellectual property sense to everything it touches¹⁶ and Microsoft *is* in the intellectual

¹² Full text at: <http://www.microsoft.com/resources/sharedsource/licensingbasics/permissivelicense.mspix> (29/03/2007).

¹³ See www.gnu.org for full text of the GPL; see also Rosen, Open Source Licensing, pp. 103-140.

¹⁴ This is mirrored in the GPL under point 3 which reads as follows:

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:
 - a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
 - b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
 - c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

¹⁵ Jim Allchin, quoted e.g. at: http://news.com.com/Microsoft+raps+open-source+approach/2100-1001_3-257001.html.

¹⁶ Steve Ballmer quoted in 'Ballmer: Linux is a cancer' at: http://www.theregister.co.uk/2001/06/02/ballmer_linux_is_a_cancer (27/03/2007)

property business: “Microsoft is an intellectual property (IP) company. We have no factories of any consequence or natural resources. Indeed, we have no physical assets of any kind that are important to the success of the company. Our products instead consist almost entirely of information we create – primarily instructions to microprocessors on how to perform various functions.”¹⁷ Can Microsoft therefore be truly interested in becoming a part of the Open Source movement or is, after all, the above finding that both the Microsoft Permissive License and the Microsoft Community License are open in the meaning of the Open Source definition nothing but a pleasant dream?

At this point it is worth considering the broader picture, in particular Microsoft’s Shared Source Initiative as a whole and the question how the two apparent Open Source licenses fit into this picture. Microsoft itself propagandised their Shared Source Initiative as a “move to the middle”.¹⁸ This, in itself, is not conclusive as to Microsoft’s true intentions; neither is Microsoft’s announcement that above mentioned Shared Source licenses do not apply to the Enterprise Source Licensing Program, Systems Integrator Source Licensing Program, OEM Source Licensing Program, MVP Source Licensing Program, Windows CE Premium Source Licensing Programs or Government Security Program, all of which form part of Microsoft’s Shared Source Initiative.¹⁹ Microsoft’s Windows operating systems, though they may fall to some extent under the umbrella of the Shared Source Initiative can not be subject to the discussed licenses. Again, this would not necessarily create a problem as opening up some source code does not mean that a company has to make the source code of all of its programs open; only those programs will be Open Source which have been published under an Open Source license. That is how Open Source works. The concept of Open Source is not an intellectual property destroyer – if destroying is defined as some viral process that ‘making’ one software program Open Source always and inevitably leads to having to make all programs Open Source.²⁰

Therefore, regardless of its owning that it is an intellectual property company, Microsoft could still have joined the previously so detested – some may even say feared – other side that is called Open Source. This is however only possible if first there are, indeed, programs to which either the Microsoft Permissive License or the Microsoft Community License apply and, second, there would be no more ‘strings’ attached to the use of said licenses.

With regard to the first it appears safe to say that there are some programs which have been published under these licenses, though it might be rather difficult to find these in the jungle of Microsoft’s manifold Shared Source Initiative licensing schemes and programs – after all, why else should Microsoft then bother to have these licenses anyway?²¹

The more interesting and conclusive point however, is the question if there might not be restrictions in place which effect the licenses in question and thus effectively and ultimately negate their being Open Source licenses. Given that these licenses are only part of a bigger program, this leads to the question of participation in Microsoft’s initiative. Microsoft operates an interesting scheme as to how one can indeed participate in one of their Shared Source Programs. This scheme comprises three different steps: first, one has to determine the relevant Shared Source Initiative program, i.e. to which licensing scheme a particular software program belongs; second, one has verify one’s eligibility for that licensing scheme and, third, one has to download the source code. Of these steps, it is the second step that might cast a different light on Microsoft’s apparent open source licenses as Microsoft reviews national laws, practices, enforcement policies and attitudes towards intellectual property protection when determining one’s eligibility to participate in the Shared Source Initiative as such.²² Thus, this eligibility criteria also applies in relation to said licenses and only if this criteria is met, will Microsoft source code be *made* available. This is the main difference to real Open Source software and Open Source licenses where no eligibility criteria has to be met – whoever wants to join an Open Source

¹⁷ Bill Gates, Direct Testimony, State of New York v. Microsoft Corp., at: <http://download.microsoft.com/download/5/3/2/53239546-efee-460c-a583-11c20cdea9ab/billgates.pdf> (27/03/2007).

¹⁸ Microsoft, Shared Source Initiative Overview, at: <http://www.microsoft.com/resources/sharedsource/Initiative/Overview.aspx> (27/03/2007).

¹⁹ Microsoft, Shared Source Licenses, at: <http://www.microsoft.com/resources/sharedsource/licensingbasics/sharedsourcelicenses.aspx> (27/03/2007).

²⁰ Moreover, Open Source software is as much intellectual property as proprietary software, the only difference being that open software is not used in order to achieve licensing fees; though one can, of course, make money with Open Source. Cf. Till Jaeger, No License to Bill, at: http://www.ifross.de/ifross_html/art19.html (27/02/2007).

²¹ On the other hand, the licenses could be perfectly pointless as other possible motives can, of course, be envisaged: may it to appear in a more positive light to customers (“we are not as bad as our reputation”) or to lull opponents into a false sense of security (“we are part of the Open Source community too”). However, this is not to say that this is, indeed, the intention of Microsoft.

²² Microsoft, How to Participate in Shared Source, at: <http://www.microsoft.com/resources/sharedsource/licensing/getsource.aspx> (27/03/2007).

software project or to modify an Open Source software program for his own benefit can do so without having to fill in application forms or to pass some selection process. Microsoft's Shared Source licensing programs are, on the other hand, only available to certain geographic markets; in particular, the licenses discussed in this paper are not available in countries which are subject to U.S. trade embargoes, currently Cuba, Iran, Iraq, Libya, North Korea, Sudan and Syria.²³ The question of a Shared Source program's availability to certain geographic markets therefore acts as an entrance barrier to Microsoft's Shared Source Initiative as such. Consequently, this criteria also affects both the Microsoft Community License and the Microsoft Permissive License which, in their nature, are non-discriminatory against specific groups of people and open in the sense of the Open Source definition. However, given that participation in and use of these licensing schemes is possible only after having met the eligibility criteria, this requirement has to be regarded as part of every licensing program and thus, also forms part of the above mentioned licenses. Both licenses can therefore not be considered truly open in the meaning of the Open Source definition.

Conclusion

It would appear that perceived wisdom was right after all: Microsoft has not seen the light and embraced the Open Source philosophy. There is a simple reason for this: Microsoft is an intellectual property company and their work has always been about controlling and exploiting their intellectual assets – everything else would be against their very nature. That this is more than just an assumption can be seen in their recent change of the Microsoft Reference License. A change of direction to Open Source would however require a change on both a philosophical and conceptual level. To put it another way: the leopard would not only have to change its spots but also have to embrace vegetarianism.

However, the question remains why Microsoft should go to the lengths of introducing quasi-Open Source licenses? Again, the reason may be obvious: Microsoft's Shared Source program recognises that there are many benefits to the openness, community involvement, and innovation of the Open Source model.²⁴ The most important factor of this model however is freedom, something that is apparently deeply suspicious to Microsoft. And is there is a better way to fight a suspicious concept than by pretending to be exactly like said concept and thereby swallowing the opposition from within that feared and loathed movement? This is exactly what has been described as the "Embrace and Extend" strategy, or in the words of a Microsoft employee: "Commercial software development processes are hallmarked by organization around economic goals. However, since money is often not the (primary) motivation behind Open Source Software, understanding the nature of the threat posed requires a deep understanding of the process and motivation of Open Source development teams. [...] In other words, to understand how to compete against OSS, we must target a process rather than a company."²⁵

Mimicking a successful competitor, which is what Open Source is to Microsoft, is a clever way to make a competitive movement appear to be obsolete; in the present case, this would primarily be the point of availability of source code. As said before, from a user's point of view the question of the source code's availability is probably rather a case of "I'd much rather have the code of the software than not have the code of it." than the more philosophical ideas behind the whole concept of Open Source. If Microsoft now is able to create the impression that its concept does exactly the same as what the competing Open Source concept does, i. e. giving access to source code, chances are that the competing movement might eventually become insignificant or even disappear. And that is, from the perspective of the Open Source movement, where the danger lies. Though Microsoft's Shared Source Initiative and the above discussed licenses in particular do just that (give access to source code), this initiative 'forgets' one important aspect: the freedom of choice.

But that does not mean that Microsoft's initiative is inherently wrong. After all, what is wrong with somebody creating something to set the terms on which it is distributed? That is exactly what Open Source licenses like the GPL or the MPL do. And if that works for Microsoft's customers, why is or should this be wrong? However, if the fact that the information flow and software market might potentially be controlled by one single entity the question remains, will this foster innovation? What is therefore needed is awareness, awareness that Microsoft's Shared Source Initiative is something *like*

²³ Microsoft, Shared Source Licensing Programs: Availability by Geographic Market, at: <http://www.microsoft.com/resources/sharedsource/Licensing/Availability.msp> (27/03/2007).

²⁴ Bruce Perens, Free Software leaders stand together, at: <http://perens.com/Articles/StandTogether.html> (27/03/2007).

²⁵ Vinod Valloppillil, Microsoft Confidential, at: <http://www.catb.org/~esr/halloween/halloween1.html> (Halloween I).

Open Source *but not really* Open Source. Otherwise, Microsoft might succeed with its “Embrace and Extend” strategy.