TRENDS

OPEN SOURCE VS. OPEN STANDARDS

Andrew Updegrove

"The next big battleground between the Open Source and proprietary software communities will be in the area of Open Standards. You need Open Standards to implement Open Source. However this need not be a battle."
Larry Rosen, www.openstandardsalliance.or/

The call: Until recently, the title above would have suggested an article comparing the relative merits of two useful methodologies commonly employed in the marketplace. But on February 22 of this year, the phrase took on a new meaning when 29 prominent open source advocates signed a brief letter styled as "A Call to Action in OASIS", which was then widely and publicly distributed by the authors.

The letter was created in response to the adoption by OASIS of a new Intellectual Property Rights (IPR) Policy to replace the rules that had governed its process since the organization's inception. The new policy was the product of over two years of strenuous effort on the part of interested members of OASIS, including those that have, as well as have not, made significant strategic commitments to open source software (disclosure: the author participated at intervals in that process, as legal counsel to OASIS).

The actions that the authors of the letter called upon the technology community to take included the following:

> We ask you to stand with us in opposition to the OASIS patent policy. Do not implement OASIS standards that aren't open. Demand that OASIS revise its policies. If you are an OASIS member, do not participate in any working group that allows encumbered standards that cannot be implemented in open source and free software.

In fulfillment of the truism that "no good deed goes unpunished," one goal of OASIS in revising its IPR policy had been to better accommodate the creation of standards that would be more conducive to the open source process.   Specifically, the new policy permits those involved in a given standards development project to elect a royalty-free approach that permits only limited additional terms consistent with open source licensing (two other options are also permitted: non-royalty but with reasonable and non discriminatory (RAND) terms, and RAND terms plus royalty).

The context: There are a number of points that were not properly appreciated by those that drafted the letter, including the fact that OASIS has more than 600 members, not all of whom are open source proponents; the fact that OASIS has over 85 active working groups, not all of which are engaged in projects for which there is a desire or need for an open source implementation; the reality that the world has not as yet converted exclusively to an open source model, but continues to have urgent needs for traditional standards; and the fact that even if a decision were to be taken to accomplish that conversion tomorrow, there would not be enough skilled open source software engineers available to serve that brave, new open source world.

At the same time, it would be unfair to ignore the virtues of the open source methodology, and naïve to deny that the open source phenomenon does not have significant economic implications for individual companies in the marketplace, or that such companies have not sought to act in their best interests when

they participate in standard setting organizations (SSOs), including when those organizations are revising the terms of their IPR policies.

Still, the concept of calling for a boycott of a standard setting organization for adopting an industry-standard IPR policy was a startling escalation in the ongoing confrontation between the open source community and the world of traditional vendor-centric technology. It also highlighted yet another consequence of convergence in the world of technology: the creation of open standards and the development of open source can no longer be regarded as independent processes.

The issues at hand are not new for standard setting organizations (SSOs), as they have wrestled for some time with the question of whether to permit, discourage or prohibit payments and restrictive terms as conditions to license IPR that would be infringed by a standard. And in fact, there has been a steady movement in many SSOs from tolerance to avoidance of royalties. This movement has existed independent of the emergence of open source, and can be seen in some SSOs that create non-software standards as well.

In the technology arena, some SSOs have in fact gone so far as to adopt policies that make it difficult or impossible for a standard to issue that is known to require payment of a royalty or other payment to an IPR owner (the W3C being the most notable example), while others permit a given working group to elect a royalty-free mode for its activities. Indeed, some consortia host open source projects as well as traditional standard setting activities, or provide reference implementations of one or more of their standards under open source licensing terms.

The challenge: Merely focusing on whether a given IPR policy permits or requires royalty free licensing, however, misses several convergence marks at once. Open source projects and open standards organizations need to be partners in their activities, and not enemies. And each needs to fully appreciate the merits, requirements and native constraints of the other's methodology -- each of which has value.

In fact, the assumption that the open source approach is more "open" itself bears some examination. Clearly, it has great advantages. But it is also a new and evolving technique, and one that should acknowledge that it could still be improved -- perhaps by attempting to learn more from the open standards process. Consider the following:

> **Coordination:** How must open standards and open source projects interrelate at a mechanical level? Must an open source and an open standards process exist within the same entity? If not, how would the work of the two organizations best be coordinated? What liaisons should exist between SSOs and open standards projects to optimize results?

> **Where is the high ground?** The Call to Action letter refers in its open line to the "free and open source software community." But what does "open" necessarily mean (see the preceding article in this issue, **The Many Faces of "Open"**)? For example, SSO's do not require their members to commit to a given licensing approach in order to become members, and also permit non-engineers to have input into the process. At the same time, some (including, now, OASIS) permit those that are interested in a certain initiative to choose the licensing methodology that they believe most suits the nature of that project.

> **IPR certainty:** Nor is the open source process (to date) as able as the open standards process to create products that are unlikely to run into patent infringement issues. True, an SSO can only collect patent commitments from its members -- but those members often comprise those that are most likely to own the patents that might be infringed by implementations of the standards being created. Open source projects, in contrast, are only now beginning to grapple with these same issues, a challenge complicated by the fact that open source projects typically involve many individuals, rather than large corporate patent portfolio owners that have sophisticated internal patent tracking systems.

> **Liberty, equality, fraternity:** There are also governance and entitlement issues to be considered: for example, who should "own" a standard? If an SSO creates a standard, should it not have the right to set the terms under which it may be implemented? If the answer to that question is "no", does it necessarily follow that the open source community should be able to impose additional requirements? And if the answer to that question is "yes", then is the open source community not itself under an obligation to acknowledge that there may be other interest groups that should be able to assert their own

interests and requirements as well? And finally, if (as the Call to Action letter implies, but does not clearly indicate) not all standards must be conducive to open source implementations, who should be entitled to decide which standards fall into which category, and how?

Free market forces: The open source community has gained sufficient respect and commitment from large corporations that it is well able at this point to compete head to head with open standards. Rather than insisting that SSOs change their policies to permit only open source compatible licensing terms, the open source community could launch a competitive effort to provide what it believes to be a better alternative. If it is right that an open source approach is more suited to the task at hand, then the marketplace will be likely to agree with that approach. And if it is wrong, it would not be beneficial to end users for an open source approach to be mandated.

There are, after all, benefits and advantages to free market forces. The open source movement itself would hardly have progressed to its current state of influence if some vendors did not find the opportunity attractive to weaken the influence of Microsoft through the support of open source alternatives. Similarly, if end users conclude (as have more and more governments) that open source alternatives are preferable, the marketplace will pull vendors -- and SSOs -- towards stronger support of open source without the need for ultimatums.

Responsibility: The developmental position of the open source community is something like that of a teenager becoming an adult. Up until now, it could be self-centered and brash without doing harm to anyone. But as its success leads to greater and greater global dependency on open source software, open source proponents (I believe) must take on a greater sense of responsibility to those that are dependent on open source systems. Until now, it could reasonably be argued that the tight focus of the open source community was essential in order to establish the validity of open source methodology. Now that open source is here to stay, the open source community needs to give greater thought to the tedious political process of getting along with all of the constituencies that the open source community encouraged to become dependent on their efforts.

Open source software is no longer a lab experiment under a bell jar, which can be pursued for its own sake. As war is too important to be entrusted to the generals, open software is becoming too important to be entrusted to those for whom programming purity is more important than security, ease of access, the existence of mundane (but necessary) – and coordination with the realities of open standards creation.

Defining an open source - open standards interface: The questions raised above are not trivial, nor will their answers be easy to develop and agree upon. I therefore conclude that the issues are not as black and white as do the signatories of the Call to Action Letter, nor as susceptible to resolution by fiat. I do believe that it is urgent and important to optimize the interface between open source and open standards in a way that yields maximum benefits to the proponents of each methodology – as well as to consumers and other stakeholders. I also believe that the way to achieve a productive result is through dialogue and a respectful exchange of ideas.

A reasonable starting point for such a dialogue might be a presentation made by Lawrence Rosen, the first signer of the Call to Action letter, at a conference held last year called "Open Standards - Open Standards: Maximizing Utility While Managing Exposure", which was co-sponsored by ConsortiumInfo.org and at which I was a wrap-up speaker. In that presentation, Rosen proposed five principles upon which he believed that open standards should be based in order for open standards and open source to productively coexist. They are as follows:

1. Everyone is free to copy and distribute the official specification for an open standard under an open source license.

2. Everyone is free to make or use embodiments of an open standard under unconditional licenses to patent claims necessary to practice that standard.

3. Everyone is free to distribute externally, sell, offer for sale, have made or import embodiments of an open standard under patent licenses that may be conditioned only on reciprocal licenses to any of licensees' patent claims necessary to practice that standard.

4. A patent license for an open standard may be terminated as to any licensee who sues the licensor or any other licensee for infringement of patent claims necessary to practice that standard.

5. All patent licenses necessary to practice an open standard are worldwide, royalty-free, non-exclusive, perpetual and sublicenseable.

These principles are not an unreasonable starting point for a dialogue, as they clearly enunciate what is needed from an open source perspective.   But there is more to agree upon than simply licensing terms.

A Call for a different sort of Action: What is needed today is a more coordinated standard setting infrastructure, every element of which is communicating with every other -- a network centric standard setting approach, if you will. Doubtless there are lessons that the open source community could learn from those skilled in the open standards process, just as the reverse is certainly true. Similarly, it is likely to be true that the open source community could gain more converts through partnering with the open standards world than by confronting it.

Much has been learned over more than 100 years of standard setting regarding how to achieve consensus among diverse constituencies and benefit from that consensus. If open source proponents want open source to become ever more prevalent, then at minimum they will need to persuade those with other viewpoints to work with them, rather than against them. Similarly, if individual programmers wish to continue to enjoy the level of influence that they have enjoyed in the pioneer days of open source, they will need to be very savvy indeed in how they play the game, as heavyweight vendors become increasingly invested in influencing that process. History abounds with examples of revolutionaries that ultimately lose power to bankers and politicians.

In a sense, the open source community has earned the opportunity to emerge from what might be called its guerrilla warfare stage. Just as any group of freedom fighters must decide to adopt different tactics as they enter the mainstream of political life, the open source community may wish to consider what values it wishes to honor as its base of influence expands. There are real issues to be addressed, and it is likely that the most appropriate, durable and useful answers will come from consideration of the broadest input.

Hopefully, the Call to Action letter will indeed be a wake up call. But a different sort of wake up call needs to be heard by its authors as well -- a call for dialogue and the engendering of mutual respect, rather than a call for a forced conversion. I believe that if that call is answered, we will be able to point with pride not only to the worthwhile technical ends we achieve, but to the open means by which we achieved those ends as well.

Comments? updegrove@consortiuminfo.org

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Significant resources:

Call to Action letter: http://perens.com/Articles/OASIS.html

Revised OASIS IPR Policy: http://www.oasis-open.org/who/intellectualproperty.php

Email interview with Carol Geyer, Director of Communications of OASIS:
http://www.linuxbusinessweek.com/story/48374.htm

Open Standards - Open Source website: http://www.openstandardsalliance.org/

Rosen presentation (with principles): http://www.openstandardsalliance.org/dowloads/LRosen.pdf