Column for October, 2007 GeoWorld

Open Standards, Open Source, Open Community

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People who don't work in the software industry often confuse the terms "open source" and "open standards". Below we look at what these mean, how they're different, and how both contribute to an "open community" that benefits all players.

Open Source

All software begins as a result of some design process followed by development.

This design and development process may be internal to a company that sells commercial software. In this case, the process is proprietary, commercial and confidential. The process is not typically open to outside parties unless under non-disclosure agreements. Further, software developed in this process is typically sold for profit along with restrictive licensing terms.

In contrast, software can also be designed and developed in a completely open, community process. Software developed in this open, community process is termed "open source". There are ten guiding principals for open source development and use (http://www.opensource.org/docs/definition.php), all of which are designed to insure that the software remains "open" and freely available to all parties in a non-discriminatory manner.

There is also the term "commercial open source". This refers to the ability of a commercial organization to wrap with the open source software a variety of support services and "for fee" applications that use the open source software while abiding by the open source license. RedHat is an excellent example of a commercial open source company. These companies can make a profit by selling development services, such as systems integration or the development of client applications that use open source software, as well as support services and training.

The special licenses that govern use and sale of open source software exist not to ensure profits to the software's owner, but to ensure that the software's source code remains in the public domain (free to all), though companies are allowed to sell derivative products that include the open source code.

Open Standards

A standard documents a consensus agreement on the use of rules, conditions, guidelines or characteristics for products or related processes and production methods. Standards that are developed in an open, consensus process governed by well defined policies and procedures and are made freely available in a non-discriminatory manner are known as "open" standards.

Using a voluntary consensus process, standards development organizations such as the OGC enable the design and development of standards through the cooperation of many stakeholders representing many communities, including commercial, government, and university organizations, many of which also have open source interests.

There are definite similarities to the design and development processes for both the open standards and open source communities. For example, both use an open consensus process. However, there are also fundamental differences, such as how a standards organization must comply with anti-trust law and work to insure a balance of interest in the standards development process. Further, a standards organization must have a very well defined and rigorous intellectual property policy to insure that the standards are unencumbered by patents or any other essential claims. They must also commit resources (staff and financial) to insure that the IPR policy is enforced and that standards developed by the members remain royalty free.

Another way to explain the difference is that software implements open standards but open standards do not use open source software. Software and applications can be built on a solid foundation of standards.

The OGC doesn't care if software is proprietary or open source. Our goal is that OGC standards help to make geospatial or location based content and services ubiquitous – to improve the ability of decision makers to address the many pressing social and environmental and economic issues they face. What's important, from the OGC's point of view, is not the purchasing and licensing details of software products, but their adherence to a shared, open, non-proprietary system for communicating geographically.

Openness benefits markets. Vendors of proprietary software have found, in general, that, despite their fears of open software and open standards, business has increased in a more open and complex "business ecosystem" that includes more providers, more partnerships and more customers.

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