

STANDARDS CONNECTION

Open Source Opens Doors

Open-source code encourages rapid application development and improvement.

BY ROBBY ROBSON ■



Although the term “open source” has been in the news lately—thanks to some high-profile legal actions concerning the Linux operating system—there’s often disagreement about what open source means and what it implies.

“Source” in open source refers to the source code of a software application. This is what developers write. It’s quite different from the application you install on your computer. Unlike the code the computer runs, source code is human-readable. A software engineer can look at it and determine what the application does, how it works, and how to modify and extend it.

The source code of an application represents significant intellectual property. Most software vendors are reluctant to part with it, but there are reasons customers might want it. If you have the source code, you can modify and maintain a product which gives you some insurance if the vendor ceases to adequately support the product. It also makes it easier to do your own system integrations and to isolate bugs.

Availability

In the strictest sense, an application is open source if the source code is freely available. Open-source advocates argue that the ability to examine source code leads to higher quality code. But the term open source usually means more than that.

Open-source software is copyrighted and comes with a license. There are many different flavors of open-source licenses, but most grant anyone the right to redistribute the source code and many grant the right to modify it. They also guarantee that the same rights accrue to any recipient of the code. The intent is to allow software to evolve and improve through the collective efforts of individual developers and organizations with a vested interest in the software.

Whereas proprietary products are developed and maintained by a team operating under the auspices of a single organization, open-source products are developed and maintained by a distributed community of practice—“the cathedral and the bazaar,” in the words of Eric Raymond. Each method has its pros and cons.

Open-source licenses don’t necessarily prevent sales or profits. A company may charge for services such as packaging, distributing, and supporting an open-source product, and many open source licenses allow the code to be incorporated into proprietary products that are sold commercially. To succeed, enterprise software needs business models that enable its distribution, maintenance, continued development, and user support.

Open-source LMSs

An online search uncovers some open-source learning management systems, but these haven’t had much impact in the corporate training market. For examples and references, go to www.eduworks.com/opensource. Open-source learning technology is starting to appear in earnest in two places.

First, organizations interested in driving interoperability standards and architecture adoptions provide open-source tools. The idea is to provide examples that implement various pieces of standards and architectures to spark community development effort. These groups also hope that commercial developers will improve and incorporate the open-source tools into products.

Second, open-source learning technology is becoming more prevalent in the educational market. Several major universities are developing open-source course management systems and related technologies for use and distribution to other educational institutions. Open-source activity in the K-12 market is also increasing.

Open source software such as Linux and the Apache Web Server can succeed and become mainstream. Nonetheless, the vast majority of enterprise applications are and will continue to be proprietary. Support, stability, and managed upgrade paths are important for enterprise software, and these can be challenges for open-source software.

An open-source approach can enable rapid development and remove barriers to distribution. It’s therefore likely that open-source tools will play an increasingly important role in learning, education, and training. **LT**

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