

## OPEN SOURCE AND THE ILS

Open source presents an alternative to the commercial model in the way that software is produced and distributed. With the traditional commercial development paradigm, a company creates software and maintains close control on the source programs that underlie the application, releasing only the binary executable programs.

Companies that develop under this approach consider the source code their exclusive intellectual property and a key to their competitive advantage. If the source code to their applications became publicly available, anyone would be able to create the executables and use the application without paying the license fees that sustain the company. All the companies and products discussed in previous chapters follow this proprietary route.

The open-source approach to software places the source code that underlies an application in public view, allowing anyone to study, compile, and even modify the original application. With open source, a community of interested programmers takes responsibility for the creation, ongoing development, and support for an application.

This cadre of programmers may be distributed throughout the world, working for many different companies, or simply as interested individuals. Much unpaid volunteer effort supports open-source software, though many companies pay programmers to develop software within the open-source guidelines.

Some of the most successful software available today was created through open-source methods. Linux, an open-source variant of Unix, stands as the premier example of this approach to software development.

The remarkable success of Linux as an operating system is trumpeted by its ability to challenge Microsoft Windows, and to gain the support of industry giants such as IBM. Likewise Apache, the Open Source Web server software, powers the majority of the websites throughout the world.

Given the success of open source in other areas, what impact does it have in the ILS arena? Note that no open-source ILS available today stands in close comparison to the commercial systems described in this report.

The open-source ILS that has gathered the most attention is called Koha. A computer consulting company named Kapito Communications initially developed this system for the Horowhenua Library Trust in New Zealand. This library serves a population of about 30,000 with a collection of 80,000 items and consists of a main library and two branches.

Koha, the most respected of the open-source systems, in its current state of development, lacks many of the basic features expected in an ILS that will serve a medium-sized to large library. Koha compares more favorably with the low-end ILS.

Kapito, authorized by the Horowhenua Library Trust to do so, developed Koha as open-source software that could be freely used and developed by others. Ongoing work on the system continues through developers in various parts of the world, coordinated on Source Forge, a popular repository for open-source projects.

Source Forge, <http://sourceforge.net>

Koha is built completely on top of open-source components, including the MySQL relational database, Perl, PHP, and Apache, and it runs on the Linux operating system. The system includes modules for cataloging, circulation, and has a Web-based OPAC. The initial system was not MARC-based but has since been enhanced to work with MARC records.

Koha has yet to be adopted by a significant number of libraries in North America. The most notable library to use Koha in the United States is the Nelsonville Public Library in Athens County, Ohio. This library system has seven branches and manages a collection of 250,000 items. Nelsonville migrated to Koha from a Spydus system from Civica, an Australian company. Spydus has only about a dozen libraries using it in the United States and does not maintain a U.S. support center.

Only a small handful of libraries in North America have implemented an open-source ILS, comprising an insignificant part of the overall library automation scene. Yet good success by these few libraries has the potential to spark interest in others, leaving open the possibility that these systems may be more popular in the future.