

Open-Source Software

Presentation to
South Central Library System Board
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By Tom Zillner

Open Source Software

- Very much in vogue in the library world because of recent developments
 - Discontinuation of systems
 - Consolidation

Open Source Software

- Many misconceptions surround open source software, the most significant being:
 - Misconception: Open Source Software is free.
 - Truth: Open source software is often, but not always, totally free of acquisition costs
 - Traverse
 - Even though it is “free”, there are hidden costs that may emerge.

What is Open Source Software (OSS)?

- Software is considered open source if it meets ten conditions or criteria. Among them:
 - The software can be freely given away or sold.
 - The *source code* must be included or freely obtainable.
 - Redistribution of modifications must be allowed.

What is “source code”?

- Computer software includes the kinds of computer programs that run on individual computers or on servers, and every size of computer in between.
- When a piece of software is developed, a programmer writes it in a human-readable language. The software in this form is called source code.

What is “source code”?

- Most software is distributed in a form computers can “understand”, sometimes called *object code*, and no source code is provided. This is called proprietary software.
- If no source code is provided, the software cannot be modified by the user.
- Software is often considered a trade secret by its developers, in order to protect it from illegal copying (which decreases income).

Contrast This With Open Source

- Source code is provided.
- So, OSS can be modified and maintained by the user.
- OSS is never a trade secret, because the source code is never secret, by definition.

Just to complicate things: Open Source vs. Free Software

- The Free Software Movement, initiated by Richard Stallman
 - Since free software may be freely redistributed, its acquisition is generally available at no cost.
 - Free as in freedom
 - Free as in beer

Why should I care?

- OSS is often very useful.
- Includes the Linux operating system, which is the operating system for millions of computers worldwide
- Also includes the apache web server, also found worldwide
- Perhaps most importantly for libraries, there are now open source versions of integrated library systems (ILSs).

OSS for Libraries

- Some open source ILSs have all of the features of ILSs from commercial vendors.
- Open source ILSs (like other OSS) are *extensible*.
 - Commercial vendors may not implement features requested by users.
- If they're free, why not use OSS ILSs?

Why Not Use Open Source ILSs?

- You may be happy with your current ILS.
- You may be happy with tech support from your vendor.
- Your vendor may be willing to provide source escrow.
- Staffing issues
- Hardware

You are happy with current ILS



This is a perfectly good reason to stay with your vendor.

However, you may want to conduct a review process to determine what features you need and which systems meet these specifications.

You may be happy with vendor
tech support



Another good reason to stay with your vendor.

However, tech support for open source ILSs is
obtainable.

Source Escrow

- Insures that the ILS source code will be available to you under certain conditions, e.g., the vendor goes out of business.
- With open source software this is not an issue.

Staffing

- Using an open source ILS will not reduce your staffing needs
 - System administrator
 - Hardware support
 - Possibly, a programmer

(Although these functions may be filled by fewer than 3 people)

Hardware



Using an open source ILS will probably not decrease your hardware requirements.

Free



Open source software, is definitely free in terms of freedom, not beer, because of costs beyond its acquisition, and sometimes an acquisition cost as well.

Why Use an Open Source ILS?

- Source code is easily available.
- *Acquisition* cost is free (as in beer).
- There is often a cadre of volunteer programmers to fix bugs and add features.
- There are companies that support open source ILSs.
- Ongoing costs may be no more, and potentially far less, than those for proprietary software.

A Caveat...

- If you switch ILSs (whether to another proprietary system or to open source) there will be [possibly substantial] costs
 - Data migration
 - Hardware setup
 - Software configuration and option setup

The Two Best-Known Open Source ILSs

- Koha
- Evergreen

Koha

- “Koha includes modules for circulation, cataloging, acquisitions, serials, reserves, patron management, branch relationships, and more.”
- There is a mix of public libraries and academic libraries using Koha.
- First version of Koha developed for a public library in New Zealand and released in 1999.

Evergreen

- “Evergreen was built from the ground up as a flexible, fault-tolerant system capable of supporting the workload of large library systems and consortia.”
- Includes “circulation, cataloging, and statistical reporting.”
- Mix of public and academic libraries
- Originally created by the Georgia Public Library Service to support the PINES Consortium.

You Don't Have to Go It Alone

- Koha is supported by a number of companies around the world. The most prominent one in the US is LibLime.
- Evergreen is supported by Equinox Software, home of the original creators of Evergreen.

LibLime

- “Fully-managed solutions”
- Development and Customization
- Training and Support

Equinox

- Evaluation
- Testing
- Migration
- Deployment
- Support

As a sometime programmer...

...I believe, like many others, that your library's data belongs to your library and its patrons.

Your Data Is Yours

- Data may be locked up in a proprietary system.
- Access to the data may be only through preset mechanisms controlled by the vendor.
- Free the bound data!
- This will allow imaginative use of it.

Questions?

Acknowledgement

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Tom Zillner
Wisconsin Library Services
tzillner@wils.wisc.edu
(608) 262-0047