

FLOSS for Libraries: For Administrators

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Overview

- What it is
- Where it is in libraries
- For administrators
- Where it's going

Free/Libre/Open Source Software

- Philosophy of software **freedom**:
 - Free to **use**
 - Free to **study**
 - Free to **copy**
 - Free to **modify**

Backstory

- Free came first, proprietary later
- Restrictive licensing changed culture
- Restrictive licensing made money
- Challenge necessitated response

Hackers Respond

- GNU Project (est. 1984)
- Free Software Foundation (est. 1985)
- GNU General Public License v2 (est. 1991, v3 in process)
- "Open Source" and "Libre" software

Worldwide Success

- Your organization uses free software:
 - Networking (protocol-level, DNS)
 - Email (client, server, spam/virus filter)
 - Web (client, server, applications)
 - Programming, databases
 - Search engines, e-commerce

No End of Work

- Non-free software still doing okay
- License enforcement
- License training
- Free software registration/directory
- Updating GNU GPL
- Ongoing education

FLOSS is Not...

- ... more likely to succeed or fail
- ... restricted to certain kinds of:
 - People
 - Projects
 - Organizations
- ... the "same" as Open Access
- ... a "free kitten"

Works Well With

- Well-understood problems
- Huge developer community
- Huge user community
- New applications
- Libraries!

FLOSS in Libraries

- You probably use it already
- Your ISP uses it
- Your vendors use it
- Your competitors use it

In Your Library

- Infrastructure (networking, email)
- Application tools (languages, databases)
- Desktop clients (browser, email)
- Library services

FLOSS Library Apps

- Metadata tools
- Protocols
- OPAC/ILS
- Repositories
- Public Services

Metadata Tools

- MARC.pm
- MARC::Record
- MARC4J
- pymarc
- ruby-marc

Protocols

- OAI-PMH (too many to list)
- Z39.50/SRU (too many to list)
- ISO ILL (OpenRequest)
- OpenURL (CUFTS, OLinks, OCLC)
- NCIP (forthcoming)

OPAC/ILS

- Koha
- Evergreen/Open-ILS
- PHPMyLibrary
- ISIS (too many to list)

Repositories

- FEDORA
- Greenstone
- DSpace
- aDORe

Public Services

- Bibliography (too many to list)
- ReservesDirect
- Others:
 - Reference tools
 - Proxy
 - Workstation administration

Patterns

- Well-understood problems:
 - Standards
 - Protocols
- Big development community:
 - MARC tools
- New applications like repositories, harvesting

Gaps

- Pure business functions:
 - Invoicing
 - Inventory control
- Really good interfaces on smaller-community problems
- Understanding

Question Break

For Administrators

- An algorithm (with a moral)
- Tending your geeks
- Making choices
- How to participate
- Becoming a vendor

An Algorithm

IF ((you need a library building) AND

(it's 1900) AND

(the Carnegies offer one)):

ACCEPT BUILDING;

WHILE (you want to run a library):

STAFF BUILDING;

SUPPORT BUILDING;

DEVELOP COLLECTION;

CONTINUE;

An Algorithm (updated)

IF ((you need software) AND
(it's 2006) AND
(FLOSS is everywhere)):

ACCEPT FLOSS;

WHILE (you want to run a library):

STAFF FLOSS;

SUPPORT FLOSS;

DEVELOP COLLECTION;

CONTINUE;

The Moral

- In 1900, you couldn't run a library without a building, but you didn't need software
- In 2006, you can't run a library without software, but you don't need a building
- FLOSS is as massive a donation of time, energy, and products you cannot afford to turn down today as Carnegie-built libraries were back then

Tending Your Geeks

- Biggest reward is seeing software get used:
 - Helping existing projects
 - Distributing your own
 - More using, less starting from scratch
- Computer Science is well-understood; get them trained!

Tending Your Geeks

- Use Python and Ruby
- Join oss4lib-discuss and code4lib lists
- Go to Access or code4lib conferences
- (A new machine every year helps too :)

Making Choices

- Are there FLOSS alternatives?
- Does your vendor use FLOSS?
- Does your vendor contribute to FLOSS?
- Write in a "FLOSS clause":
 - Rights to use/study/copy/modify
 - Trigger conditions

Making Choices

- Ask my boss why she prefers FLOSS:
 - Can get more from it than what you put in
 - Cost-effective
 - Helps deliver necessary services efficiently
 - Good citizenship
 - Good publicity

Making Choices

- Managing scarcity:
 - Scarce knowledge of proprietary apps, abundant knowledge of FLOSS
 - Scarcity of experienced staff, abundance of FLOSS-familiar
 - Changing scarcity of resources, abundance of options from FLOSS freedoms (cf. Google)

How to Participate

- Choose FLOSS
- Join discussion lists (oss4lib-discuss and project-specific)
- Tell your friends
- Amuse your enemies
- "...then you win." -M.K. Gandhi

How to Participate

- Not just code -- needs include:
 - Documentation
 - Usability
 - Testing
- Share your developers
- Donate to projects
- What's in your mission?

Becoming a Vendor

- Not for everybody, but easier than you think
- Find great FLOSS examples and do what they do:
 - Up-to-date, easy-to-navigate site
 - Links to downloads and version control
 - Easy to participate (lists, tickets)

Becoming a Vendor

- Define problems locally, then globally
- Assume your problems are not unique
- Ask before you code
- Communicate through community first, locally later

Becoming a Vendor

- Pick a license from "the big ones":
 - GPL/LGPL
 - Modified BSD
 - MIT
- GPL has never been successfully challenged
- See gnu.org for more details

Where FLOSS is Going

- Nowhere: it's here to stay
- Everywhere: fewer and fewer "but they'll never do a Free _____" examples.

Where FLOSS is Going

- For now, still a strategic advantage in many markets
- Soon, a common property of most markets
- What will be hollowed out?
 - Market for proprietary tools having good FLOSS alternatives
 - Differences in our weird little market

Where FLOSS is Going

- Teaching with FLOSS:
 - Freedom to study, copy, and modify
 - Preparing students for marketplace
- Experimenting with FLOSS:
 - Low-cost trials
 - Understand problems better

See Also

- **gnu.org** - GNU Project
- **fsf.org** - Free Software Foundation
- **opensource.org** - Open Source Initiative
- **oss4lib.org** - Open Source Systems for Libraries
- **code4lib.org** - Where library coders hang out
- Access, code4lib, OSCON - conferences

Thanks!

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