OPEN SOURCE SOFTWARE FOR LIBRARIES

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WHAT IS OPEN SOURCE SOFTWARE?

• Open Source Software is software for which the underlying programming code is available to the users.

• They may read it, make changes, and build new versions of the software incorporating their changes.
OPEN SOURCE SOFTWARE?

"Open source promotes software reliability and quality by supporting independent peer review and rapid evolution of source code. To be certified as open source, the license of a program must guarantee the right to read, redistribute, modify, and use it freely."

Source: http://www.opensource.org/
OPEN

- Here original source code of the software is also given.
- If required, the users can modify the source code and then compile the software to use it.
- Thus, the source code is Opened up
Instructions to computers are normally written by programmers in Programming Languages like - C, C++, Java etc.

These instructions are readable by humans and referred as Source Code.

To make machines i.e. computers to understand this source code - it either permanently translated (compiled) or on-the-fly translated (interpreted) into machine level codes.
KEY TERM OF OPEN SOURCE DEFINITION

1. Free Redistribution
2. Source Code
3. Derived Works
4. Integrity of The Author's Source Code
5. No Discrimination Against Persons or Groups
ADVANTAGES OF OPEN SOURCE SOFTWARE:

- **Ability to tailor to fit local needs:**
  The availability of the source code means that a user can modify and enhance the software to more closely fit its own needs.

- **No restriction on use:**
  There are no contractual restrictions on how the software is used.

- **Low cost:**
  There is no charge for the software itself. The major cost is local development. If the number of users is large, and they share their efforts, each user’s cost is reduced.
DISADVANTAGES OF OPEN SOURCE SOFTWARE:

- **Unanticipated Efforts**: A library may find that it needs to do a great deal more work than anticipated to adapt the software to local needs.

- **Lack of coordination**: The decentralized development of open source software means that progress can be chaotic and there may be delays in addressing bugs.

- **Inadequate technical support**: Documentation tends to be limited and aimed at developers. There usually is limited technical support, especially for users of the software.

- **Customization**: Open source software may not offer the level of customization as it is being done in case of commercial software.
OPEN SOURCE SOFTWARE:
CHALLENGES

• Requires technical knowledge and experienced.
• Accompanying documentation is usually is poor.
• Paid support is difficult to get for new software.
• There is poor coordination between hardware vendors and open source community.
Open Source Software: Challenges Contd..

- Librarians are used to proprietary software applications integrated or running over Microsoft Windows platform.
- Might have already invested lot of money and efforts in establishing automated systems over a period of time.
TEETHING PROBLEMS IN USING OPEN SOURCE SOFTWARE APPLICATIONS IN LIBRARIES

- Open source software solutions are best suited for libraries
- The majority of these problems are in-fact teething problems and will go away with on “growing up”.

The benefits of using open source software over a period far outweigh as compared to propriety software.
<table>
<thead>
<tr>
<th>Type of Software</th>
<th>Proprietary</th>
<th>F/OSS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Web Browser</td>
<td>Internet Explorer</td>
<td>Mozilla Firefox; Opera</td>
</tr>
<tr>
<td>Word processing</td>
<td>Microsoft Word</td>
<td>Open Office Writer</td>
</tr>
<tr>
<td>Presentations</td>
<td>Microsoft PowerPoint</td>
<td>Open Office Impress</td>
</tr>
<tr>
<td>Spreadsheets</td>
<td>Microsoft Excel</td>
<td>Open Office Calc</td>
</tr>
<tr>
<td>Database</td>
<td>Oracle; ms sql server</td>
<td>MySQL PostgreSQL</td>
</tr>
<tr>
<td>Graphics editing</td>
<td>Adobe Photoshop</td>
<td>GIMP</td>
</tr>
<tr>
<td>Desktop Publishing</td>
<td>Quark Xpress</td>
<td>Scribus</td>
</tr>
<tr>
<td>Instant Messaging</td>
<td>AIM</td>
<td>GAIM</td>
</tr>
<tr>
<td>Finances</td>
<td>Quicken</td>
<td>GnuCash; TurboCash</td>
</tr>
<tr>
<td>PDF Creation</td>
<td>Adobe Acrobat</td>
<td>PDF Creator; Ghostscript</td>
</tr>
<tr>
<td>Audio Editing</td>
<td>ProTools</td>
<td>Audacity</td>
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<tr>
<td>Flowcharting</td>
<td>Visio</td>
<td>Dia</td>
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<tr>
<td>Vector Graphics</td>
<td>Adobe Illustrator</td>
<td>Sodipodi</td>
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<tr>
<td>Email client</td>
<td>Outlook</td>
<td>Thunderbird; kMail</td>
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</tbody>
</table>
IN THE LIBRARY WORLD, FOSS

- Koha (LAMP)
- Evergreen (AJAX)
- NewGenLib
- CDS/ISIS
- DSpace
- Fedora
- Greenstone
- OpenOffice.org
- WordPress
- Drupal
- MarcEdit
WEB 2.0

- Available anywhere, anytime
- Convenience is king
- Second generation web services
- Social networking
- blogs, wikis, tagging
- Emphasis on collaboration and sharing
- Leverages “wisdom of the crowd”
LIBRARY 2.0

Web 2.0 tools are used to deliver library services.

- Blogs and Wikis
- RSS Feeds
- Social Networking
- Social Bookmarks
- Tagging
If you wish to install the software on your own server, many open source software are available for providing library 2.0 services. Here are some of the most popular OSS

<table>
<thead>
<tr>
<th>Category</th>
<th>OSS</th>
<th>Free Hosting Web Sites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wikis</td>
<td>MediaWiki, TWiki, PHPWiki</td>
<td>WikiSpaces</td>
</tr>
<tr>
<td>RSS feeds</td>
<td>RSSOwl reader, QuickRSS</td>
<td>Google Reader</td>
</tr>
<tr>
<td>Social Networking</td>
<td>SOPAC, PHPBB, Drupal</td>
<td>FaceBook, Youtube, Twitter, Flickr</td>
</tr>
</tbody>
</table>
Content Management:

- It helps manage complexity.
- It provides a user interface (UI) for adding, editing and publishing content.
- It provides a means for collaboration among many to perform the above tasks.
WHAT CAN DRUPAL BE?

- Blog
- Forum
- Online newspaper, Portal / Directory
- Social community site, job post board
- Video site like youtube
- Project management site
- Customer Relationship Management (CRM, ERP, SCM, Wiki)
- Shopping cart system
- E-learning, training site
- Dating site
- Anything you can think of

Drupal can be downloaded from http://drupal.org/download
WORDPRESS: AN OPEN SOURCE SOFTWARE FOR BLOGS

- **What is Wordpress?**
  - Website creation
  - Blog Software

- **Where are Wordpress sites hosted?**
  - On Wordpress.com (free)
  - On your personal webserver
  - On a paid webserver service

WordPress Software can be downloaded From: http://wordpress.org/download/
FEATURES OF WORDPRESS

WordPress started as just a blogging system, but has evolved to be used as a full content management system and so much more through the thousands of plugins, widgets, and themes.

- Full standards compliance (w3c)
- No rebuilding
- Pages to manage non-blog content easily
- Links to create, maintain, and update any number of blogrolls
- Themes for powerful designs
- Comments
- Spam protection etc.
MediaWiki: An Open Source Software for Wiki

- MediaWiki is a free, open source wiki package (software) written in PHP, originally for use on Wikipedia. It is now used by several other projects of the non-profit Wikimedia Foundation and by many other wikis.
- It's designed to be run on a large server farm for a website that gets millions of hits per day.
- MediaWiki is an extremely powerful, scalable software and a feature-rich wiki implementation, that uses PHP to process and display data stored in a database, such as MySQL.

Mediawiki can be downloaded from: www.mediawiki.org/wiki/Download
**RSSOwl**: A n Open Source RSS Reader

- RSSOwl lets you gather, organize, update, and store information from any compliant source
- Convenient, easy to use interface
- Save selected information in various formats for offline viewing and sharing
- It's easy to configure
- It's platform-independent.

RSSOwl can be downloaded from: [http://www.rssowl.org/download](http://www.rssowl.org/download)
SOPAC: SOCIAL ONLINE PUBLIC ACCESS CATALOG

- SOPAC is a module for the Drupal CMS that provides *true* integration of your library catalog system with the power of the Drupal content management system while allowing users to tag, rate, and review your holdings.
- User input is then incorporated into the discovery index so that SOPAC becomes a truly community-driven catalog system.

The SOPAC software can be downloaded from: http://thesocialopac.net/downloads
SOPAC FEATURES

- Faceted browsing
- 100% customizable interface via the Drupal template system
- Ability to remove search limiters
- Saved searches
- Integrated renewals, holds placement, and fine payment
- Ability to customize the user experience via the administrative control panel
- Ability to create custom functionality via a Drupal sub-module
**PhpBB**: Open Source Bulletin Board Software

- **PHPBB** is a free flat-forum bulletin board software solution that can be used to stay in touch with a group of people or can power your entire website. Some of the important features are:

  **Registration**
  **Posting**: The primary purpose of PHPBB is to facilitate discussion via posting.
  **Attachments**: Share files by uploading them to the board, attaching them to posts.

BURNING QUESTIONS

- Will I save money?
- Where do I get help?
- Is this software high quality?
- Is it secure?
- Reliable?
CONCLUSION

- Using open source software is as good as owning it.
- Suitable candidate for long term library use.
- Worth spending time and energy on learning and adopting.
Thank You