

Free/Open Source Integrated Library Management Systems

Comaprative analysis of Koha, PhpMylibrary and OpenBiblio



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Presentation will cover

- Need for Free/Open Source software.
- What is Free/Open Source software?
- Features of free software
- Features of open source software
- Integrated Library Management System (ILMS)
- Free/Open Source ILMS
- Koha, PhpMylibrary and OpenBiblio
- Findings
- Suggestions

Need for Free/Open Source software

- Cost of commercial software's is very high
- Commercial developers do not reveal the source code of their programs



What is Free/Open Source Software?

Free/Open Source software is , software that users have the ability to run, distribute, study, and modify the program for any purpose.



History of Free/Open Source Software

- 1984 Richard Stallman formed Free Software Foundation (FSF).
- 1991 Linus Torvalds developed Linux
- 1994 Red Hat (commercial Linux) company founded
- 1998 “Open Source Initiative” was formed



redhat.



Features of Free Software

- GNU public license (GPL).
- Anybody can do anything with public domain works.
- 73 % of free softwares registered under GPL Licence.



Features of Open Source software

- Historically evolved from free software.
- Open source grants 4 freedoms (run, study, distribute and modify).
- Open Source Initiative License (OSI).
- Open Source has a copyright holder.



Integrated Library Management System (ILMS)

“an automated library system that is capable of managing the operations of more than one basic library functions”

-UNESCO



Modules of library processes in an ILMS

- Acquisition
- Cataloguing
- Circulation
 - OPAC



Main objective

- Evaluation and examination of free/open source ILMs.
- To find a less costly and efficient library software.



Popular commercial ILMs

Name	Approximate Price
Libsuite 	Rs. 4,50,000
LibSys 	Rs. 4,50,000
SOUL 	Rs. 50,000
Alice for WINDOWS	Rs. 3,50,000

Free/Open Source ILMs

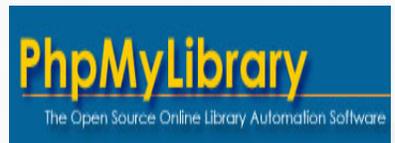
- Avanthi Circulation System
 - Emilda
 - FireFly
 - Koha
 - PhpMylibrary
 - OpenBiblio
 - WEBLIS
 - OpenILS
 - PhpMyBibli
 - GNUTECA
 - PMB
 - Learning Access ILS
 - FireFly
- 



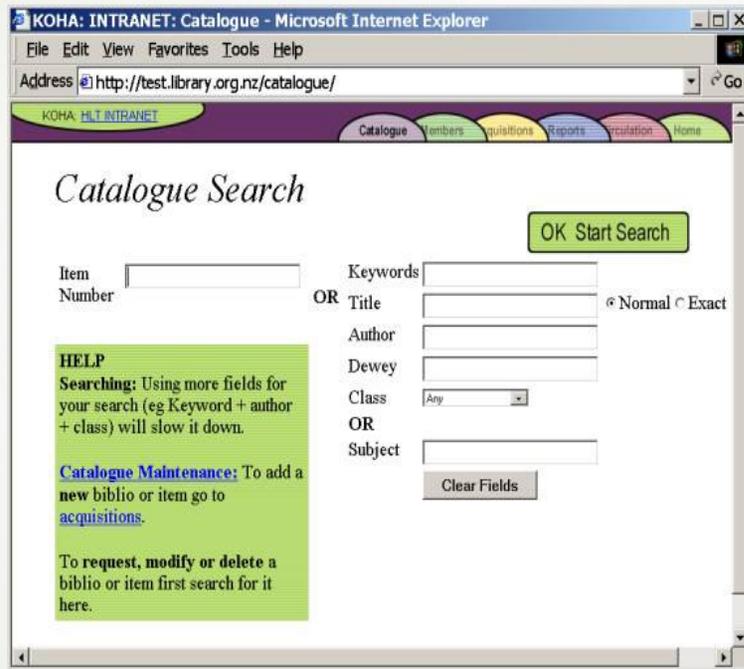
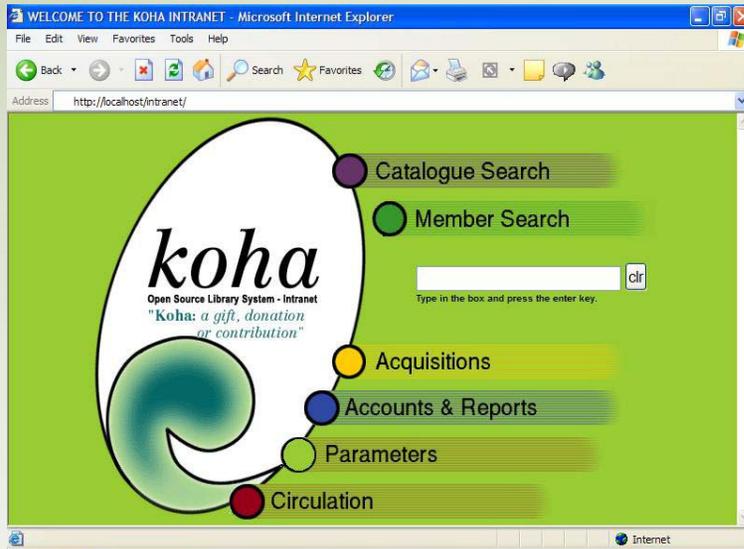
Koha



OpenBiblio



PhpMyLibrary



License: The GNU General Public License

Developer: Horowhenua Library Trust, New Zealand

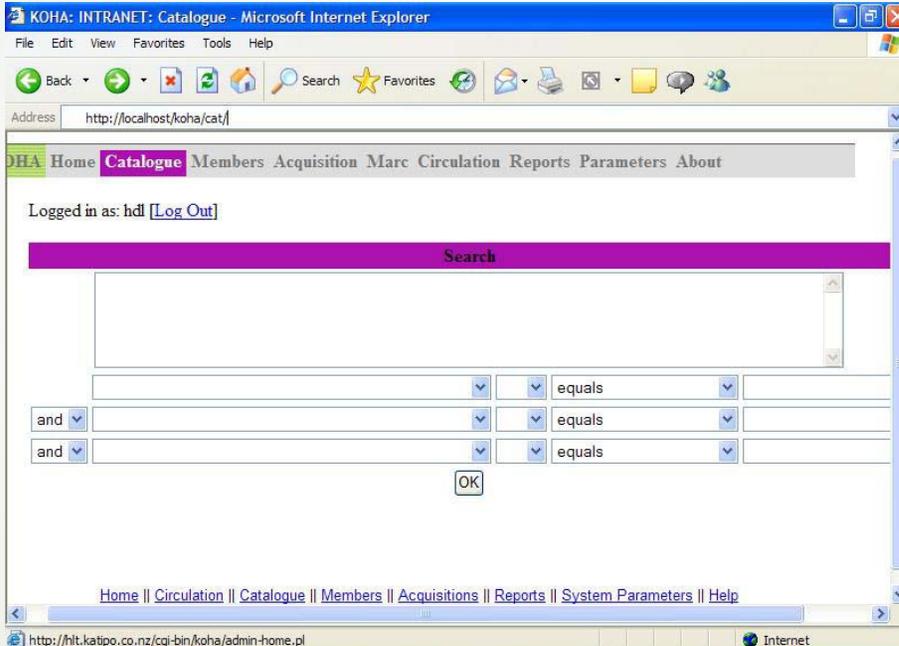
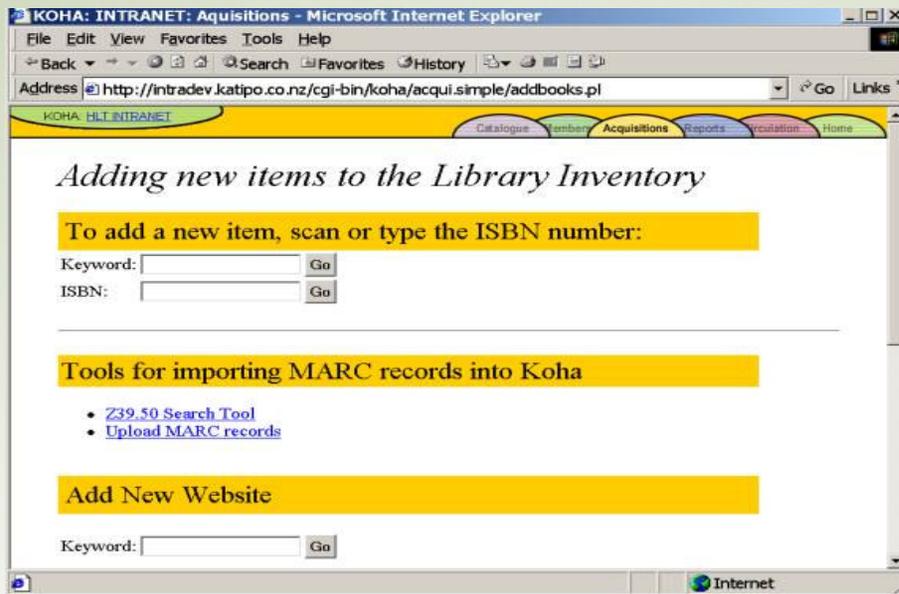
Operating System: Linux, Windows.

Programming Language: Perl

Functional Modules: Acquisition

Cataloguing, Circulation, Serial Control

Home Page: www.koha.org



Koha features

web-based OPAC,
circulation and
management interfaces,

MARC21 and UNIMARC
support,

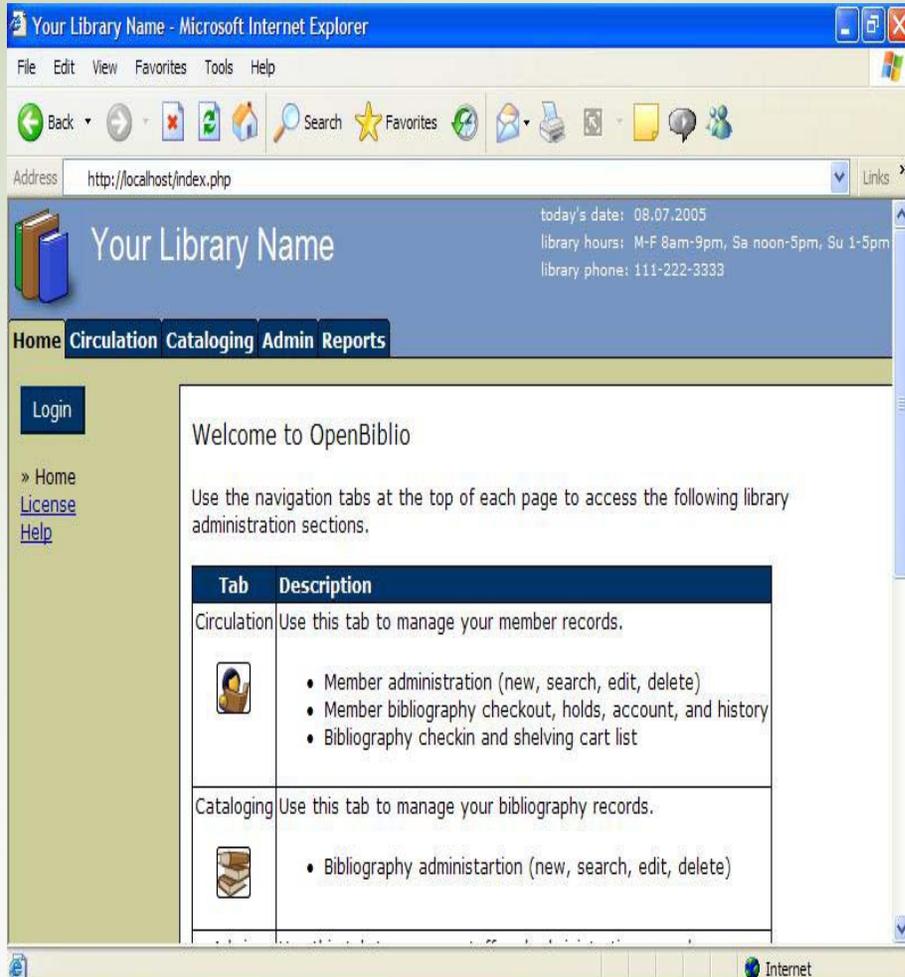
Z39.50 server, Online

Reservations& Renewals,

E-mail Overdue
Notifications.

Virtual Shelves

Barcode Generator



Developer: Dave Stevens

License: GNU General Public License (GPL)

Operating System: Linux, Windows

Programming Language: PHP

Functional Modules: Acquisition, Cataloguing, Circulation

Home Page:

<http://obiblio.sourceforge.net/>

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites

Address http://localhost/openbiblio/

Your Library Name library phone: 111-222-3333

Home Circulation **Cataloging** Admin Reports

Logout

Bibliography Search
 > New Bibliography
 Upload Marc Data
 Help

Fields marked with * are required.

Add New Bibliography:

* Type of Material:	book
* Collection:	Adult Nonfiction
* Call Number:	<input type="text"/>
Show in OPAC:	<input checked="" type="checkbox"/>
USMARC Fields:	
* Title:	Colon Classification
Remainder of title:	<input type="text"/>
Statement of responsibility, etc.:	<input type="text"/>
* Personal name:	Ranganathan, SR

Internet

Your Library Name - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites

Address http://localhost/openbiblio/

Your Library Name today's date: 08.07.2005
 library hours: M-F 8am-9pm, Sa noon-5pm, Su 1-5pm
 library phone: 111-222-3333

Home Circulation **Cataloging** Admin Reports

Logout

> Search
 New Bibliography
 Upload Marc Data
 Help

Cataloging

Search Bibliography by Barcode Number:

Barcode Number: Search

Search Bibliography by Search Phrase:

Author Search

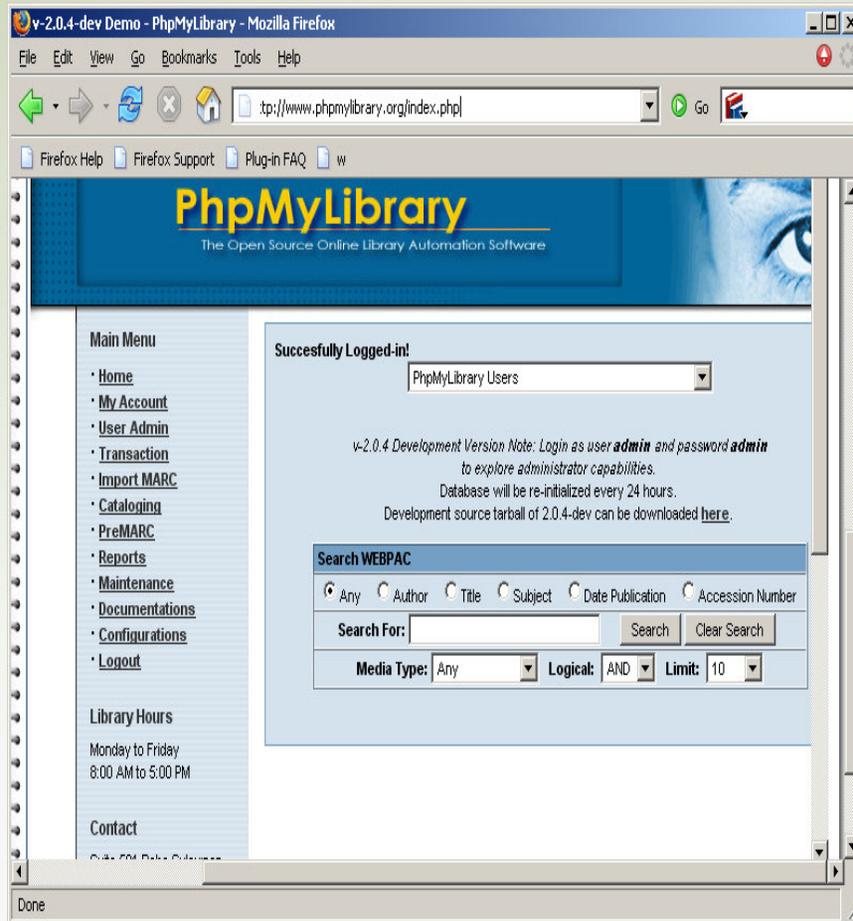
OPAC | Help

powered by
OpenBiblio

Internet

OpenBiblio features

Barcode input
 web-based OPAC,
 circulation and management
 interfaces,
 MARC support,
 Online Reservations &
 Renewals,
 Barcode Generator
 Report Generator
 Interface customization



PhpMyLibrary

The Open Source Online Library Automation Software

Developer: Polerio Babao
License: GNU General Public License (GPL)
Operating System: Linux, Windows

Programming Language: PHP, PL/SQL, Python
Functional Modules: Acquisition

**Cataloguing
Circulation**

Home Page:
www.phpmylibrary.org

PhpMyLibrary features

web-based OPAC,
circulation and management
interfaces,
MARC support, CDS/ISIS conversion
Online Reservations & Renewals,
Report Generator
Interface customization

The screenshot shows the main page of the PhpMyLibrary application. The browser window title is "v-2.0.4-dev Demo - PhpMyLibrary - Mozilla Firefox". The address bar shows "http://www.phpmylibrary.org/index.php". The page features a blue header with the "PhpMyLibrary" logo and the tagline "The Open Source Online Library Automation Software". A left sidebar contains a "Main Menu" with links for Home, My Account, User Admin, Transaction, Import MARC, Cataloging, PreMARC, Reports, Maintenance, Documentations, Configurations, and Logout. Below the menu are "Library Hours" (Monday to Friday, 8:00 AM to 5:00 PM) and "Contact" information. The main content area is titled "PhpMyLibrary Reports" and lists several report categories: Transaction Reports (Book Status Code List, General Library Transaction Listing), Circulation Reports (Access Control Code List, User Type Code List, User Status Code List, User Department or Category Code List, General Library User Listing), and Cataloging Reports (Holdings Code List, Branch Location Code List).

This screenshot shows the "Load Predefined Tags" page. The browser window title is "v-2.0.4-dev Demo - PhpMyLibrary - Mozilla Firefox". The page displays a "Sample Accession Entry" with a complex string: "949 __ \$aMainlib \$b653.1 \$cB64 \$d1965 \$gAcc-1231 \$hCirculation \$iBook \$jProperty-121". Below this, there is a "Media Type" dropdown menu set to "Books". A table lists predefined tags with columns for "No.", "Tag", "Help", and "Value".

No.	Tag	Help	Value
1	001		__ \$a
2	005		__ \$a
3	020		__ \$a
4	082		__ \$a
5	100		__ \$a
6	245		__ \$a

At the bottom of the page, the "Contact" information is updated to "Suite 501 Raha Sulayman".

Methodology of the study

- Selection of free/open source ILMS
- Installation and running the softwares entering sample data
- Data collection using a checklist
- Scoring of software performance
- Computation of the performance of free/open source ILMS

Data collection list

1. ACQUISITION

Selection of Items
Duplicate checking
Selection of Vendors
Ordering
Claiming
Receipting
Fund control
Reports & statistics

2. CATALOGUING

Recording Creation
Duplicate checking
Record editing
Authority control
Cataloguing copies
Key word/ thesaurus generation
Import & export of data

3. PUBLIC ACCESS CATALOGUE

Normal search
Advanced search
Search strategies
Status enquiry
Print provision
Prompts & Help messages
Disposition of retrieval data
Internet access
Other catalogue forms

4. CIRCULATION

Patron & Items files
Setting parameters (Issue, return, renewal fees, fine etc)
Issue and Return
Fines & overdue notice
Holds & recalls
Reservations
Renewal
Short term loans
Interlibrary loans
Reports & statistics

5 SERIAL CONTROL

Fund control
Ordering
Receipting
Claiming
Binding

6. Management

information
Tools for the analysis of statistical information

7. System maintenance

User assistance
(Manual/ literature)
Security of records and files
Up- gradation
Customization

Scoring Scheme

Excellent	5
Very good	4
Good	3
Average	2
Poor	1
Not available	0

Acquisition -Analysed data

Sub-functions	Score		
	Koha	PhpmyLibrary	OpenBiblio
Selection of Items	4	0	0
Duplicate checking	3	0	0
Selection of Vendors	5	0	0
Ordering	4	0	0
Claiming	4	0	0
Receipting	4	0	0
Fund Control	4	0	0
Reports & Statistics	4	0	0
Total 40	32 (80%)	0 (0%)	0 (0%)

Cataloguing - Analysed data

Sub functions	Score		
	Koha	PhpMyLibrary	OpenBiblio
Record creation	5	3	3
Duplicate checking	3	0	0
Record editing	4	3	3
Authority control	3	0	0
Cataloguing copies	4	2	4
Keyword/ thesaurus generation	4	3	3
Export & Import Data	3	4	3
Total 35	26 (74.29%)	15 (42.86%)	16 (45.72%)

Circulation- Analysed data

Sub- functions	Score		
	Koha	PhpmyLibrary	OpenBiblio
Patrons & Item files	4	3	3
Setting parameters (Issue return, renewal, fees, fine, etc.	5	4	4
Return	5	4	4
Fines & overdue notices	4	3	4
Holds & recalls	3	3	4
Reservations	5	3	4
Renewal	4	3	4
Short term loans	3	0	0
Interlibrary loans	4	0	0
Reports & statistics	3	3	2
Total 50	40 (70%)	26 (52%)	29 (58%)

Serials Control: Analysed data

Sub- functions	Scores		
	Koha	PhpMyLibrary	OpenBiblio
Fund control	5	0	0
Ordering	5	0	0
Receipting	5	0	0
Claiming	5	0	0
Binding	5	0	0
Total 25	25 (100%)	0 (0%)	0 (0%)

Online Public Access Catalogue (OPAC): analysed data

Sub- functions	Scores		
	Koha	PhpMyLibrary	OpenBiblio
Normal search	5	3	2
Advanced search	4	3	0
Search strategies	4	3	0
Status enquiry	5	5	5
Print Provision	3	4	0
Prompt & help messages	2	1	1
Disposition of retrieval data	2	4	0
Internet access	5	5	5
Other catalogue form	4	3	0
Total 45	34 (75.56%)	31 (68.89%)	13 (28.89%)

Management of information-Analysis of data

Sub- functions	Score		
	Koha	PhpMyLibrary	OpenBiblio
Tools for analysis of statistical information	1	0	0
Total 5	1 (20%)	0 (0%)	0 (0%)

System maintenance facilities- Analysis

Sub- functions	Scores		
	Koha	PhpMyLibrary	OpenBiblio
User assistance (manual/ literature)	3	1	1
Security of records & files	4	3	3
Up- gradation	5	3	3
Customization	5	3	4
Total 20	17 (85%)	10 (50%)	11 (55%)

Summary of Findings

Functions/ sub- functions	Scores		
	Koha	PhpMyLibrary	OpenBiblio
Acquisition	32	0	0
Cataloguing	26	15	16
Public Access Catalogue (OPAC)	34	31	13
Circulation	38	26	29
Serial Control	25	0	0
Information management	1	0	0
System Maintenance Total	17	10	11
Total	173 (78.63%)	82 (37.27%)	69 (31.36%)

Findings

- Koha satisfies all the functional requirements of a library management system.
- Acquisition and serial control are not available in PhpMyLibrary and OpenBiblio.
- PhpMyLibrary and OpenBiblio are suitable for libraries with small collection.
- Free/Open Source softwares does not need the initial costs of commercial software.
- It enables libraries to have greater control over their computer environment.
- Free/Open Source ILMS have all the features of commercial system available in the market.
- Most of the free/open source ILMS are OS independent.
- Installation is the most difficult part in free/open source software.
- Documentation is not sufficient for free/open source library systems.

Suggestions

- Need for librarians to try with free/open source softwares.
- Need for constituting a committee consisting of librarians and computer professionals.
- Library professionals should be involved in the free/open source ILMS development projects



Thank you

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