



# KOHA

## OVERVIEW AND FEATURES

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# INTRODUCTION



# Open Source ILMS

- **A Library Management System (LMS) or Integrated Library System (ILS) is an enterprise resource planning system for a library, used to track items owned, orders made, bills paid, and patrons who have borrowed.**
- **And Open Source LMS is available for use as free with its source code made available and *licensed with a license* in which the copyright holder provides the rights to study, change and distribute the software to anyone and for any purpose**

# Open Source Integrated Library System (ILMS) Products

- **MicroLCS,**
- **Emilda**
- **Evergreen**
- **FireFly**
- **GNUTeca**
- **Avanti**
- **OpenBiblio**
- **phpMyLibrary**
- **PMB**
- **PYTHEAS**
- **WEBLIS.**
- **Koha**

# Differences between OSS and Proprietary LMS

- **OSS LMS are easier to customize (including reports)**
- **Proprietary LMS normally has more features**
- **Costs**
- **OSS LMS have more flexible support options**
- **Hard to generalize, but OSS LMS are not as complex**
- **OSS LMS modules are mostly web based**
- **OSS LMS are easier to evaluate**

# Criteria for Evaluating Open Source Integrated Library Systems

- **Active current development under way.**
- **Availability of modules and their completeness: At least the cataloging, circulation, patron access catalog modules, acquisitions and serials control should be available. It should be Integrated library system.**
- **International Standards Supported: MARC , Z39.50 etc.**
- **Current source code and documentation are available for downloading under the GNU General Public License**
- **The product is currently in use in libraries.**
- **Scalability**
- **Adaptability and user friendly system.**

# About Koha

- **Koha is a full featured Integrated Library System (ILS). there is no cost for the license, you have the freedom to modify the product to adapt it to your needs, etc.**
- **Developed initially in New Zealand by Katipo Communications with Horowhenua Library Trust.**
- **It is currently maintained by a dedicated team of software providers and library technology staff from around the globe.**
- **That by adopting it, the customer becomes "joint owner " of the product. In particular, the customer can freely install new versions or not, and can take part in new developments by financing them or by carrying them out them self.**

## Features of Koha

- **Proven, Stable Technologies:** Koha is tried and tested and has demonstrated both stability and scalability, used in hundreds of libraries worldwide.
- **Software Collaboration and Resource Sharing:** software solutions that are freely available to all libraries worldwide. libraries benefits from the contributions of other participating library systems.
- **Long term Support:** With proprietary software, source code is 'closed' and support and future development of the product rely on the success and resources of a single vendor. If the vendor goes under, so does your product support. open-source solutions rely on stable code bases developed and supported by many providers worldwide.
- **User-driven:** open-source software user-driven--you decide what features are important and deserve attention rather than a vendor.

## Features of Koha .....

- **Cost-effective:** paying licensing fees for proprietary solutions, users of open-source software can often deploy the product using in-house resources. They pay only for needed support or any additional vendor services they require.
- **Innovation:** code is open, users are free to innovate and improve the software to meet their needs Free innovation also means that open-source software has much faster development cycles when compared to proprietary software.
- Free/open source software koha is an economical alternative to reliance upon commercially supplied software. It means the cost involved development, license, upgrading, maintenance etc., lower than commercial software. koha does not need the initial cost like commercial software.
- Free/Open source Koha has all the feature of commercial software.
- Motivate and encourage staff to creativities.

# Koha Feature .....

- **A full featured modern integrated library software (ILS).**
- **Award winning and free/Open-source Software.(no license fee).**
- **OS independent any operating system. Linux, Unix, Mac.**
- **Web based. Web-based Interfaces. We can integrate with website**
- **Full MARC21 and UNIMARC support for professional cataloguing.**
- **Multilingual and multi-user support**
- **Library-Standards-Compliant. industrial standards & protocols.**
- **Z39.50 server.**
- **Customizable web based opac.circulation system.**
- **Online reservation.**
- **Full catalogue, circulation, acquisitions, library stock management**
- **Web based OPAC, public to search the catalogue.**
- **Major industry-standard database type (text, RDBMS), SQL,MYSQL**
- **Serial management module.**
- **Print your barcode.**
- **Export and import records, ISO2709**

# Koha Cost

- **Free/open source software Free download under the GNU General Public License.**
- **Users of open-source software Koha can often deploy themselves using in-house resources. They pay only for needed support or any additional vendor services they require.**
- **It means the cost involved development, upgrading, maintenance etc., Koha does not need the initial cost like commercial software.**
- **Here cost means commitment, dedication, and a long term efforts to sustain and development of the software.**

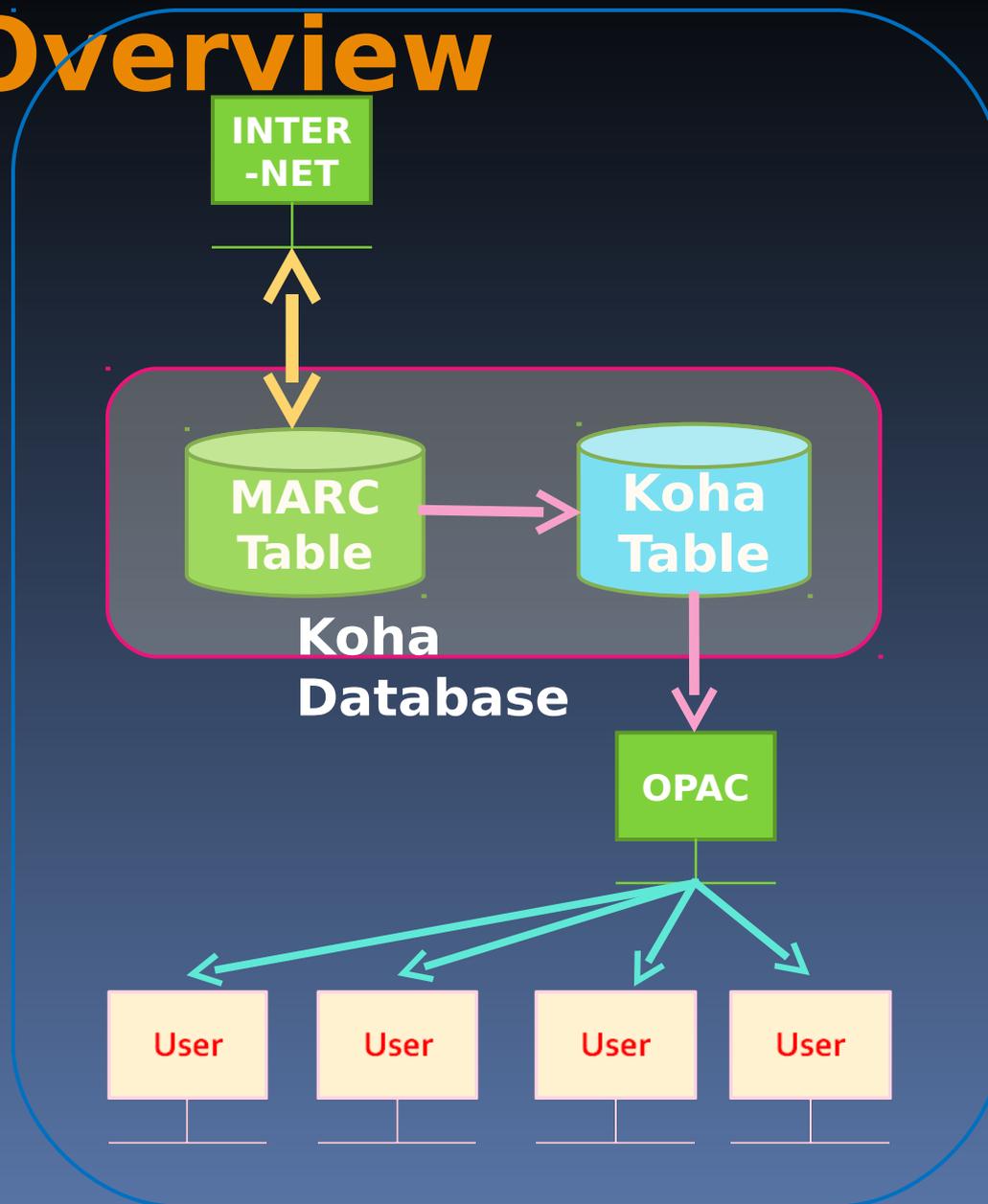
# Koha Users

- **More than 300 libraries are using Koha, including academic, public, school and special libraries, in Africa, Australia, Canada, USA, France, India and, of course, New Zealand. Along with a committed team of programmers its development is steered by a growing community of libraries collaborating to achieve their technology**

# Compare Koha and Commercial LMS

S.No	Core services	Alice	Libsys	New Genlib	Soul	VTLS	Libsuite	Koha
01	Acquisition	1	1	1	1	1	1	1
02	Cataloguing	1	1	1	1	1	1	1
03	Circulation	1	1	1	1	1	1	1
04	Web/OPAC	1	1	1	1	1	1	1
05	Serials	1	1	1	1	1	1	1
06	Biblio format	1	1	1	1	1	1	1
07	Data exchange	1	1	1	1	1	1	1
10	Standards	1	1	1	1	1	1	1
11	Cost(Approx .)	3.5 Lakh	4.5 Lakh	Open Source	50000	8.00 Lakh	4.5 Lakh	Open Source

# Koha System Overview



# Koha System Architecture

- Koha is based on a client-server architecture.
- **Network Server:** koha can be installed on a server running Linux, Unix, Mac. The recommended operating system is stable version of Debian Linux, although Koha can run on any modern operating system.
- **Client Workstations:** Koha requires only a web browser on the workstation (a graphical browser, or even a text browser for the OPAC). Koha thus functions on PCs running Windows, PCs running Linux, Macs, or even UNIX workstations.
- Koha runs over any TCP-IP network.
- Koha accommodates low-bandwidth connections. It is completely usable on ordinary telephone line connections. This is more true of the librarian interface than of the public interface (OPAC).

# Set up Koha for Library Automation

## Use following equipment :

- A circulation desk computer, if needed
- A computer to serve as your OPAC, so patrons can access the catalog
- Barcodes for patrons
- Barcodes for materials
- Scanners, at least one for your circulation point, but also perhaps for your OPAC
- A printer

# Set up Koha for Library

## Automation ....

You should take a look at the 3.12.x Implementation Checklist from Koha Manual's Chapter-13 (<http://koha-community.org/documentation/>).

Before you get started, be sure to have your setup parameters ready :

- Library phone number and address
- Library branch code
- Administrative email address
- Funds and budget info (if you are using the acquisitions function)
- Item types
- Category codes
- Patron categories
- Circulation rules (such as circulation periods)
- Fine rules
- Z39.40 server information

# Koha Software Requirements

**Application  
(KOHA)**

**PHP/PERL**

Apache

MySQL

**Linux (Cent OS)**

# Koha Server Software:

- **Server operating system: Linux, OpenBSD, FreeBSD, MacOS X, or any other Unix.**
- **Web server: Apache.**  
from (<http://www.apache.org>)
- **Programming language: Perl.**  
from (<http://www.cpan.org>)
- **Database:MySQL.**  
from (<http://www.mysql.com>)
- **Integrated Library software: Koha 2.2.9**  
from (<http://www.koha-community.org/>)

# Koha Client Software

- **Koha requires a recent Internet browser.**
- **Mozilla is advised, but not obligatory. (Koha works with Internet Explorer.).**
- **Certain data validity checks are made on the client machine, JavaScript must be enabled.**
- **The public interface (OPAC) conforms with XHTML1.0 standards: the utility is thus compatible with alternate browsers. In particular, the OPAC can be used by people needing special assistive technology (Braille browsers, voice synthesis, text-based browsers, etc.).**

# Skill Requirements To Operate System:

- Koha's interfaces are designed with usability in mind and are extremely user friendly.
- Staff and patrons with only basic computer skills have quickly learned to use the system efficiently.
- The cataloging module requires an understanding of cataloging practices such as MARC, Z30.50 retrieval tools, how to add holdings information, etc.
- Administrators should know operating system (Linux, etc.) for maintenance, some knowledge of cataloging in setting up the system preferences.

# Koha GUI:

- **Administration**
  - Global Preferences
  - Local Preferences
- **Acquisition**
- **Circulation**
- **Catalog**
- **Patron Management**
- **Serials**
- **Reporting**
- **OPAC**

# Koha OPAC Module

- Koha provides a full-functioned Online Public Access Catalog (OPAC).
- OPAC users can carry out searches starting from ten fields (Keyword, Subject, Title, Class, Barcode, author, publisher, etc.). As in the librarian interface, they can order the results according to several criteria.
- OPAC users who are logged-in members can place reservations on library items.
- Biblio basket: Logged-in members can select records from an OPAC search and retrieve them by e-mail, either in human-readable form or in an ISO2709-format file. An ISO2709 file can be processed using bibliographic software like End Note.
- OPAC users can submit suggestions for acquisition. Koha automatically informs the OPAC user (by e-mail) of the action taken on each suggestion.

# Koha Delegation of Authority

The administrator can allot one or more of the following capabilities to each staff member:

- Super-librarian: access to all functions.
- Circulation: carry out circulation tasks.
- Catalogue: search the catalogue.
- Parameters: administer the system parameters.
- Borrowers: manage the public users (addition, modification, restriction, etc.).
- Permissions: administer staff access to functions.
- Reserves for others: place reserves on items for any borrower.
- Reserves for oneself: place reserves for oneself
- Loan: loan items to borrowers.
- Cataloguing: manage the catalogue.
- Charges: manage the fines and fees levied against members.

# Koha Members Module

- The members (borrowers) module makes it possible to manage not only individual borrowers, but also institutions.
- Each member belongs to a category. The member category defines:
  - The minimum and maximum ages for members of the category
  - The cost of placing a reservation on an item (when it is applicable in the library)
  - The rules of circulation.
- By entering the borrower's library card number into the librarian interface, the librarian can:
  - See the financial standing of the borrower (charges due).
  - See the borrower's reservations, and his/her outstanding loans.
  - Set permission flags (for the librarian members).

# Koha Circulation module

- Borrowing a book from any branch (not just the branch where the borrower first registered)
- Returning an item at any branch
- Reserving an item for at any branch.
- Circulation rules can be defined very finely by the library: for each member category, item category, and holding branch of the item, the duration of the loan and the maximum number of books loan able can be defined.
- Returning items ("checking-in") is extremely easy: Simply scan the barcodes of the items being returned.

# Koha Cataloguing Module:

- **MARC Management** :The cataloguing module is one of the principal strong points of Koha. Several "frameworks " can be defined to do different cataloguing for monographs, electronic resources, periodicals, etc.
- **Export/Import**:Importing records in ISO2709 format (the MARC reservoir) and through Z39.50 (client) for fast cataloguing.
- **Copy records**:One or more copy records can be attached to each bibliographic record.
- **Fast cataloguing**:To accelerate cataloguing, Koha provides, Management of a MARC record reservoir, in ISO2709 format, A Z39.50 client that can access several Z39.50 servers
- **MARC view and simple view**:Catalogue data can be displayed in MARC format, in simplified form.
- **Searching**:searches can be performed on any MARC field. Advanced functions, search on one word, the beginning of the field, greater than, less than, etc are also available.

# Koha Serials Module:

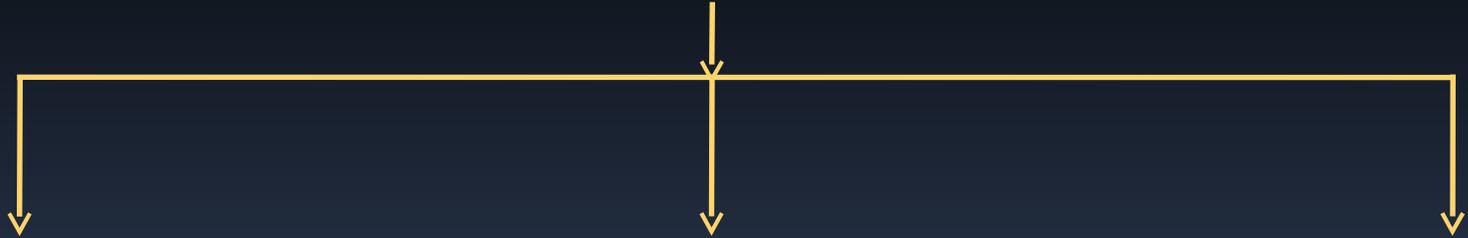
- It is possible to register subscriptions with reviews, and to track the arrival of periodicals.
- Koha manages late issues, skipped issues, and claims with the suppliers.
- Koha manages complex classifications, allowing the librarian to work with eleven different publication periods (from daily newspapers to annual publications), with delayed publications, and with publications out of sequence.
- A state of the collection can be defined which will synthesize the missing publications, received publications, etc.
- The state of the collection can be displayed differently in the OPAC and in the librarian interface.

# Koha Acquisition Module

- **Simple acquisitions:** The simple acquisitions module makes it possible to acquire materials and add them directly to the catalogue. It does not manage budgetary matters, the orders placed with the suppliers, etc.
- **Full acquisitions:** The full acquisitions module makes it possible to manage: Budgets and book funds: Budget available, Committed, Spent Suppliers. Orders, via 'shopping baskets'.

# Koha Personalization

The architecture of Koha divides the software into 3 different layers.



**Database Layer**  
(which manages access to the DBMS )

**Processing Layer**  
(which manages the processes required by the User)

**Formatting Layer**  
(which contains templates for the HTML presentation)

- The visible interface of the software is thus entirely customizable. Koha's Intranet and OPAC by selecting from several 'themes'
- The librarian interface uses cascading style sheets (CSS). It is more coherent and easier to follow than was the case in version 2.0.

# Koha Operating Parameters

**Koha allows you to set various parameters which control the operating environment of the library:**

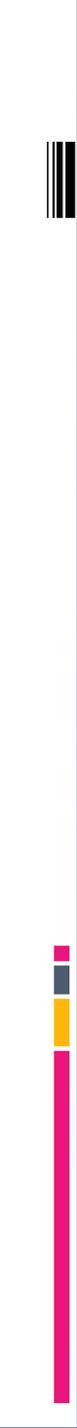
- **Library branches:** defining branch categories, branches, and contact information.
- **Item types:** Define library items.set rental charges of any amount to users for borrowing items.
- **Not for loan"** for item types such which do not leave the library; issuing
- **Define Borrower Categories:** Set "Category Codes", "Descriptions", "Enrollment Periods", "Upper Age Limit" and "Age Required" for each user type;
- **Issuing rules:** define issuing and fines based on borrower categories, item types, and circulation units (matrix-based rule set);
- **Stop words:** improve list all of the words Koha should ignore when performing catalog searches or building the index
- **Z39.50:** define servers for searching using Koha's Z39.50 client (for cataloging); to add servers, enter the domain name or IP address of the server, the port number to use, and the name of the database to access.
- **Book funds:** set up accounts that keep track of expenditures for library materials.

# Koha Resources

- [http:// kohadocs.org/](http://kohadocs.org/) koha documentation project
- [http:// koha-community.org/documentation/](http://koha-community.org/documentation/) The official Koha manual
- [http://www.skemotah.com/](http://www.skemotah.com/Migrating_to_Koha.html) Stephen Hedges' Koha migration guide  
Migrating\_to\_Koha.html
- <http://athenscounty.lib.oh.us/koha.html> Joshua Ferraro's Koha installation guide and other Koha documents
- <http://sourceforge.net/projects/koha> Koha project CVS host (2.2/2.0 source code repository/download)
- <http://www.mjr.dsl.pipex.com/> Koha project Arch host (2.0 source code/repository/download)
- [http:// wiki.koha-community.org/](http://wiki.koha-community.org/) KohaWiki
- <http://bugs.koha.org> Koha bug reporting system
- <http://koha.org/ mailing/> Koha mailing lists page
- <http://koha.org/irc/> Koha IRC logs
- <http://koha.org> Koha Homepage
- <http://www.ttlp.co.uk/koha/> Koha England

# Frequently Asked Questions

- **Collection Size- How many books Record can koha handle?**  
**Ans: All the data i.e. records, readers, circulations data is stored in database mysql. All the limitation are enforced by database and your hardware, network connectivity , *not by the software.***
- **Readers- How many readers can koha handle?**  
**Ans: Nelsonville Public Library System, Athens County OH, USA 7 branches; 300,000 items; 50,000 borrowers; 600,000 annual circulation OPAC: <http://search.athenscounty.lib.oh.us>**
- **Circulation- How many transaction can koha handle per year?**  
**Ans: The Harward County library system is switched to koha recently and they do transaction 50,00,000 issue per year.**
- **Biggest Library- which is the biggest among those who uses?**  
**Ans: North East University Library, Cyprus 2 million records OPAC: <http://library.neu.edu.tr>**



Thanks