

# **Circulation Module of Koha and LibSys: An Observation at St. Xavier's College Central Library, Kolkata**

**Mr. Sougata Chattopadhyay,**

Library Assistant, St. Xavier's College, Kolkata; E-Mail: Sougata\_chattopadhyay@yahoo.co.in

**Dr. Chinmay Mukhopadhyay,**

Librarian, St. Xavier's College, Kolkata; E-Mail: drchinmay.mukhopadhyay@gmail.com

**Abstract:** *The present paper is a study of open source library management software Koha and proprietary library automation software LibSys. The study aims to develop an understanding about strengths and weaknesses between the two software viz. LibSys4 and Koha (3.14) so far as the circulation module is concerned. The study is based on the day to day experiences gathered from using the two softwares in St Xavier's College Central Library. Koha software has an extremely user-friendly interface and it is cost effective which makes more challenging to the traditional LMS software like LibSys.*

**Keywords:** LibSys, Koha, Patron, Circulation

---

## **Introduction:**

One of the important challenges of the librarians for automating libraries is the selection of good integrated library management system, which caters the needs of the library. Proprietary as well as open source library automation software is available in the market. Most of the libraries are not in a position to buy high priced commercial software due to their financial constraint. Open source software is easily available and 'free of cost' and committed to user's freedom to use, customize as per the requirement of the library managers.

The objective of the paper "Circulation Module of Koha and LibSys : An Observation at St. Xavier's College Central Library, Kolkata" is to develop an understanding about strengths and weaknesses of the two softwares viz. LibSys and Koha. The paper is based only on circulation module of LibSys4 and Koha 3.14; actually the central library of St Xavier's College was using LibSys and from 2014 onwards it is using the open source library software Koha (3.14).

The paper is mainly concentrated on the day to day experiences gathered out of using the two softwares in the library.

## **LibSys:**

LibSys is an integrated library management software package designed and developed by LibSys Corporation, Gurgaon, Haryana. It was initially developed in COBOL language but now it is converted into C language and covers all the activities of library related to acquisition, circulation, cataloguing, serial control, articles indexing, abstracting, OPAC, etc. LibSys follows international standards such as CCF, MARC, etc. It has some special characteristics, viz. interactive and screen oriented, menu driven, user defined security, multilingual and powerful editing facilities.

## **Koha:**

Koha is widely used open source software. Koha is the first choice of the librarian who wants to automate library with open source software and those who wants a transition from commercial software to open source software. The software developed initially in New Zealand by Katipo Communications in 2000. Koha is released under the GNU

General Public License and Linux (any flavour like Fedora, Ubuntu etc) is used as Operating system. Apache web server is required to serve the Koha on web. The data entered in the Koha are stored in MYSQL database. Perl is the programming language used in Koha. Acquisition, cataloguing, circulation, serial control, report, administration are the basic modules available in Koha.

### **The Library: An Overview**

The library is the heart of every educational institute which scatters information and knowledge to meet the needs of the user community. Before 2009 the St Xavier's College had three departmental libraries namely, Arts & Science, B.Com and Economics, Political Science & Sociology and one common reading room. All these three departmental libraries were merged into one centralized system since January 16, 2009. The St. Xavier's College has a well equipped library with a collection of books, journals, reports, audio-video materials, e-books, online databases and other resources to serve its users. Now, the library is fully automated using barcode and RFID technology to issue and return books with the help of open source library software Koha. In this library open access system is followed. The user community, here is comprised of UG & PG students, research scholars, ex-students, faculty and other staff members of the college.

### **Problems encountered during day to day transactions in St. Xavier's College Central Library with the previously used software LibSys4:**

There were several problems faced while using LibSys for routine works of the library. Some of the major problems are as follows:

- ❖ Lack of Web OPAC module for browser based searching throughout the campus.
- ❖ Lack of good configuring features to set circulation privileges for various types of users and documents.
- ❖ Lacking more features and flexibility related to fine management.
- ❖ Less user friendly cataloguing module.
- ❖ Lack of features related to bar-code and membership card generations and configurations.
- ❖ Lack of data export facility.

### **Circulation module of LibSys and Koha: An Observation**

Below is a detailed discussion of our observations for some of the functional areas in the circulation module.

#### **Circulation through Koha:**

Circulation work in a library involves a group of operations that are specific, repetitive and systematic. Circulation systems through Koha require minimum set of essential data for carrying out circulation activities. Circulation systems are designed to capture and manipulate three kinds of datasets i.e. information about the borrower (Name, Address, Category and Membership No), information about the borrowed documents (Bibliographic information, item information i.e. reference copy, number of available copies, status of the document i.e. Lost, Damaged, Hold etc.) and information about the rules for loan (fixing Issue date, Return date, etc.)

#### **Circulation through LibSys:**

The circulation system is the most important function of LibSys as it provides for all the front-desk operations of a library. Titles which are catalogued and indexed are now

ready for circulation among the library members. The circulation system facilitates the registration of members, maintenance of their status, knowing about the status of titles in the library, maintenance of the database, inter library loan, collection of fine from members and online searches. Before starting the use of the circulation system, some parameters can be set by the system setup function of this module.

### Patron Maintenance:

#### ➤ Member Registration:

Adding patrons is fairly easy and straight forwarded in both the software. The major difference here is that Koha forces the administrator to choose the patron category under which the patron will be added. This might appear beneficial; however, when the list of patron category becomes very long it may become difficult to handle. The structure of the form is different in the two softwares. Koha has one long form whereas in LibSys it has two sections. One very useful function that both the software have is to generate duplicate record notification; in Koha it will be based on any two of the three fields namely first name and surname and card no and whereas in LibSys membership no (i.e. Alt ID) is sufficient to get the notification. Both in LibSys and Koha login and password are automatically generated if it is left blank. During member creation in Koha access privilege of the staff member is also to be set up. For any modification, in LibSys category of the patron can never be changed. In LibSys during member registration parent child concept (so far as the privileges of circulation rules of staff members) is not there, which is available in Koha. In Koha for patron registration there is no group under category concept, this facility is, however, available in LibSys. In Koha we can add note for circulation as well as OPAC whereas in LibSys only circulation note can be written. For temporary 'expiration' i.e. cancellation of membership it is possible to add manual restriction with or without the time frame in Koha, but in LibSys it can be done without the time period.

#### ➤ Searching for Patrons:

The patron search function is easy to use in both the softwares. Koha searches patron card number and name fields whereas, LibSys searches using ID no i.e. system generated number, patron card number i.e. Alt ID and name fields. Both handle partial inputs in searchable fields. However, LibSys uses 'begins with' searching, whereas Koha uses a 'contains' and retrieves partial matches.

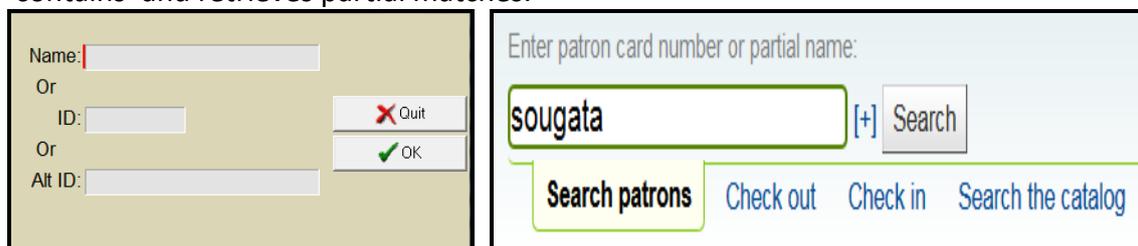


Figure 1 – Patrons Search Screen: LibSys (Left), Koha (Right)

### Check-out:

Koha allows to search for patrons by name or by card number

The systems follow the sequence of steps for circulating any items: 1) identify patron; 2) identify item; 3) check item in/out; 4) print receipt (optional).

- ❖ To issue a document, click on Check-out, it will ask for the user detail. Enter the member card no or name of the user. Enter the barcode number/accession

number of the document to be issued to the user and hit check-out button. Document will be issued to the user.

- ❖ If the patron has overdue items and/or outstanding fines, a note will appear on the patron record. If we want to see what is overdue, click on the “Details” tab. In the case of LibSys only for overdue items a note will appear.
- ❖ In Koha if a patron has reached the minimum fine amount, or tends to cross the maximum borrowing capacity of documents to be issued, check out will be disabled. In LibSys when the borrowing capacity crosses the maximum limit, the check out facility will be disabled.
- ❖ In both the software a warning will appear if trying to check an item out to a patron whose membership has already been expired.

### Check-in:

In Koha, a document can be returned using check-in option. Simply, click on Check-in, it will ask for the document barcode number/accession number. Enter the barcode number / accession number.

Figure 2 – Check-in Screen in Koha

Use the “Book drop mode” option when we are checking in items through the library’s book drop mode. In LibSys at the time of return library staff can change status of the document i.e. damaged, withdrawn. In Koha after returning the borrowed document only cataloguer can change the status of the document. In Koha all borrowed items can be returned at a time but in LibSys it is not possible.

### Renewal:

Due date	Title	Item type	Checked out on	Checked out from	Call no	Charge	Price	Renew select all   none	Check in select all   none
Previous checkouts									
14/09/2015 23:59	Aamaar kaaler kayekjan kathaashilpee, by Bhattaachaarya, Jagdeesh B10700	Books	02/07/2015 13:52	Central Library	891.443 BHA(AAM).V2	0.00		1 Not renewable	<input type="checkbox"/>
14/09/2015 23:59	Baanglaa upanyaaser itihaas, by Gupta, Khetra B10831	Books	02/07/2015 13:53	Central Library	891.443009 GUP(BAA)Ed2.V1	0.00		1 Not renewable	<input type="checkbox"/>
14/09/2015 23:59	Baanglaa upanyaaser itihaas, by Gupta, Kshetra B12502	Books	14/08/2015 15:34	Central Library	891.443009 GUP (BAA).V4	0.00		0 <input checked="" type="checkbox"/>	<input type="checkbox"/>

Figure 3 – Renewal Screen in Koha

Renewal of items from the patron account is a more user-friendly option. In Koha, renewal status and renewal options appear beside checked out items in the patron account area (assuming that online renewal is turned on). Renewal status is accompanied by any necessary explanation, for example: ‘Not renewable (on-hold)’. Simply, enter the barcode/accession number of the document and it will be renewed to

the user who already got it issued against his/her name. In both the software item wise renewal is possible and system generated due date can be changed manually; whereas in Koha all borrowed items can be renewed at a time but in LibSys it is not possible.

### **Automatic card block due to books or fines overdue:**

LibSys and Koha both allow automatic card block due to books overdue but for fine overdue only Koha can block patron's borrowing facility as per system setup.



Figure 4 – Automatic Card Block Screen in Koha

### ➤ **Fines Calculation and Payment:**

Both Koha and LibSys offer an extensive range of options for fine calculation and accepting fine from patrons.

- ❖ In LibSys item wise fine collection or write off is not possible, which is available in Koha
- ❖ In Koha fines are calculated based on an initial fine and a further loan cycle, so that the initial fine amount is increased after the item becomes overdue and a further interval passes. Both the software allows grace period during fine calculation.
- ❖ The Koha calendaring system works in days, not in hours, so it is not possible to say that a branch opens or closes at specific times of day. Hence fine calculation becomes more complicated in the presence of complex calendars.
- ❖ Koha software can check forgive overdue charges before items are scanned.
- ❖ Koha can create manual invoices and manual credit. In Koha directly bills edit not possible unless reversing.
- ❖ In Koha and LibSys patron can view circulation history, outstanding fine dues and Check out status through OPAC.

### **Additional Utilities of Circulation Module of Koha:**

#### ➤ **Branch Transfer:**

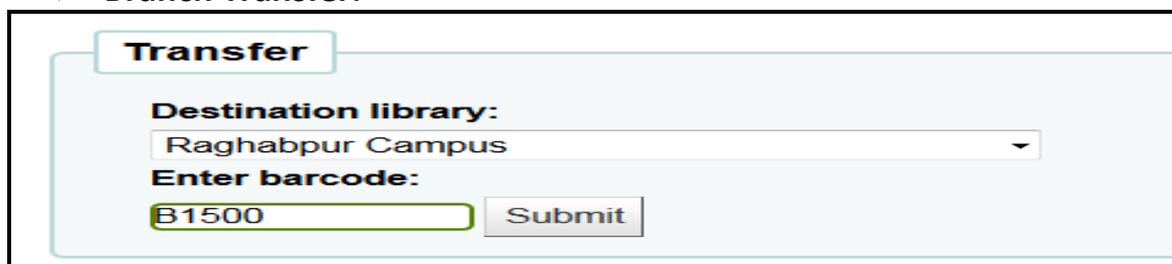


Figure 5 – Branch Transfer Screen in Koha

From time to time the library may want to send a group of items from one branch to another. When this is done, the catalogue must be updated to reflect the new location

of the items. Koha also includes a separate 'branch transfer' utility to change the holding location in the catalogue. Set the name of the branch where we are sending the items, select the library from drop down menu and enter the accession number / barcode number of the document, finally submit. It will be transferred to the destination library. This utility does not display any list or information about the item(s); it simply changes the holding location.

#### ➤ **Off-line Circulation:**

This is a unique feature given in Koha. Circulation can take place even when server is off. Later, the same can be uploaded to update the circulation detail in Koha. For off-line circulation, there is an application which can be used to issue/return the record through off-line circulation interface. In LibSys there is no off line circulation module.

#### **Finding and Observation: LibSys Vs. Koha**

- ❖ LibSys allows module and sub - module specific privileges to staff. It is possible to ensure a high level of security in the use of functional modules, based on privileges for library staff.
- ❖ Due to books overdue gradual slab wise fine increase is possible in LibSys. This was not seen in Koha.
- ❖ Departments and courses under category can be defined in LibSys. Koha does not have this feature.
- ❖ Koha allows an item to be transferred to another library configured to be in the network. This is useful and required in public library networks. Status and availability of a particular document we can easily identify from any branch library.
- ❖ Koha allows due date for check-outs include or exclude library holidays. By default LibSys excludes holidays in due date calculations.

#### **Conclusion:**

Koha software has an extremely user-friendly interface and it is cost effective which makes more challenging to the traditional LMS software like LibSys. The unique feature of the browser-based facility of the software means that multiple operations can be performed at a time. The 'Tools' module is the prime area for customization any module as per library's needs. Batch functions such as the patron import, patron card creation, Batch patron deletion/anonymization or the batch item modification become easily for the libraries that regularly have to handle significant volume of repetitive tasks. Koha's circulation reports and statistics related areas are powerful but not user-friendly like LibSys. Ultimately, only specialized staff with appropriate knowledge and skills in programming knowledge can operate these specialised functions.

#### **Acknowledgement:**

The authors gratefully acknowledge the valuable suggestions received from Mr. Abhishek Shaw, Avior Technologies Pvt. Ltd, Kolkata.

#### **Reference:**

1. <http://www.Koha-community.org>
2. Mukhopadhyay, P. (2008). *Library automation through Koha*. Kolkata, West Bengal: Prava Prakashani.