

# Managing Automation in a Multi-Library Environment

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## 1 Introduction

Today free and open source software (FOSS) has become a better alternative to proprietary software (Free and open source software, 2012). Libraries also have quickly acquired the concept into their information systems. There are multivariate open source software solutions in the market such as Koha, Avanti, Emilda, FireFly and Karuna (Open source software, 2012). Koha is one of the most advanced and cost effective open source library automation solutions and its functionality has been adopted by thousands of libraries world wide (About liblime kohal, 2012).

The library system of the Rajarata University of Sri Lanka (RUSL) adopted computer technology to enhance its services since establishment in 1995. At the initial stage the system used CDS/ISIS DOS version to computerize the catalogue (P. Ranasinghe, Personal Communication, April 26, 2012). In 1998 the system could be able to successfully update above CDS/ISIS database using Windows version, WIN-ISIS 1.31 (C.

Dissanayake, Personal Communication, April 26, 2012). In 2007 the Library Management took a strategic decision to automate their information systems under FOSS framework (A. Siriwardhane, Personal Communication, April 26, 2012).

At present the Library System of RUSL is consisted with a Main Library and three other Faculty Libraries (Faculty Library of Agriculture, Faculty library of Applied Sciences, Faculty Library of Medicine). These are located in different geographical areas within the Anuradhapura district (The library system of the Rajarata, 2012).

At present the system provides its services to 4290 undergraduates, 215 academic staff members and 340 other administrative and non academic staff members. The staff of consists of 7 professional members (Librarian, 2 Senior Assistant Librarians, 4 Assistant Librarians), 15 paraprofessional staff members and 15 supportive staff members. The whole system holds about 100,000 books and about 100 journal titles (foreign and local). These resources are available in both print and electronic formats. Services of the library include lending, reference, interlibrary loan, current awareness programs, workshops and library website maintenance. Useful links for online resources are also provided (limited abstracts only) through the library web site ([http://www.rjt.ac.lk/main\\_library/main\\_Lib.html](http://www.rjt.ac.lk/main_library/main_Lib.html)). The system wishes to manage its information system through the newly implemented library automation project (Rajarata University of Sri Lanka, 2011).

## 2 Methodology

Interviews, secondary sources and observation methods were used to collect data. Tables, Figures and Some screen shots of the applications were used to enhance clarification.

## 3 Discussion

**Table 1: Software & Hardware requirements at the project implementation**

<b>Software requirement</b>		
<b>Name of Software</b>	<b>Purpose</b>	<b>Nature of Software</b>
Debian 6.0	System functioning	FOSS
Koha 2.2.8	Application + modules	FOSS
MySQL	Data Base Management	FOSS
PHP Perl	Programming Language	FOSS
Apache	Web Server	FOSS
Firefox Mozilla	Web Browser	FOSS
<b>Hardware requirement</b>		
<b>Name of H/ware</b>	<b>Purpose</b>	<b>Nos.</b>
Local Area Network + Distribution Hub	Get access to the system within university premises	04 LANs + Maximum 25 Access points in each LAN
V-LAN	Get access to the system from other Networks	01 at Main Library
Application Server	Install Applications and DBMS	02 – 01 Main Server + 01 Replication Server

Work stations	Login to the system for staff + OPAC users at the university	15 – Main Lib.,08 – App. Lib. 07 – Agri Lib.,10 – Med. Lib.
UPS	Provide uninterrupted power supply	04 - 2 kva UPS for Main lib + 3 fac. Libraries
POS printer	Print slips at check in-check out terminals	02 – Main Lib, 02 – App. Lib. 02 – Agri Lib.,02 – Med. Lib.
Barcode readers	Smooth functions at check in-check out terminals	02 – Main Lib.,02 – App. Lib. 02 – Agri Lib.,12 – Med. Lib.

**Source: Rajarata University of Sri Lanka. (2011), & Personal observations**

As shown in table 1, it is noted that software cost was none or minimum due to the use of free and open sources software by the RUSL. The library system of RUSL used a Replication Server System for backing up data.

**Table 2: Current progress of the project**

Activity	Main Library	App. Sci. Library	Agri. Library	Med. Library
Koha version	2.2.8	2.2.8	2.2.8	2.2.8
The way of Input bib. data into the system	Converted Data from Win-ISIS	Fresh data feeding by lib. Staff - 80% complete	Converted Data from Win-ISIS	Converted Data from Win-ISIS
Preliminary data	Completed	-	Completed	Completed

<b>editing</b>				
<b>Secondary data editing</b>	80% completed	-	70% completed	Completed
<b>Parameter setting of cataloguing module</b>	Completed.	Completed.	Completed	Completed
<b>Input member data</b>	Academic staff data completed	-	Academic staff data completed	Academic staff and student data completed
<b>Issuing rules setting of Member Module</b>	Set issuing rules	Set issuing rules	Set issuing rules	Set issuing rules
<b>OPAC function through Local IP</b>	http://10.95.8.200		-	-
<b>OPAC function through Real IP</b>	http://192.248.95.7		http://192.248.94.140	
<b>Using serial Control module</b>	Not in use yet	Not in use yet	Not in use yet	Not in use yet
<b>Using Acquisition s module</b>	Not in use yet	Not in use yet	Not in use yet	Not in use yet
<b>Server Allocation</b>	01 Main Server, 01 Replication Server, 01 WEB OPAC Server		01 Main Server + WEB OPAC Server, 01 Replication Server,	
<b>Backup</b>	Manual + Replication		Manual + Replication	

<b>collecting</b>				
<b>Staff trainings</b>	03 individual workshops have been done			
<b>User awareness programs</b>	01 has done	01 has done	02 has done	02 has done
<b>System installed and consulted by</b>	Senior Assistant Librarian, University of Ruhuna			
<b>System administered by</b>	Overall administrated by Assistant Librarian, Main Library			
		Faculty wise administrated by Assistant Librarian, Faculty Library	Faculty wise administrated by Assistant Librarian, Faculty Library	Faculty wise administrated by Assistant Librarian, Faculty Library

**Source: Rajarata University of Sri Lanka. (2012), Personal observations. (2012)**

## **5 Conclusion**

It is observed that only few modules of the information system are used by the library system (only cataloging module and OPAC module are used by the whole system, & the Circulation module is used only by Medicine faculty library). However, software and hardware requirements have been achieved by the library system. The Faculty of Medicine Library has achieved much of the task while the Faculty of Applied Sciences library is still at the data feeding stage

because bibliographic data of that branch was not available in electronic form. Real time as well as manual backing up is used at the moment. It is shown that server allocation of the system is very high, and merging of two systems [(Main + Applied) and (Agri + Medicine)] could reduce the number.

Training activities for staff is in peak level. However, more user awareness programs have to be conducted.

Because of this project, the library management has gathered a massive amount of experience in library automation from top to bottom level, including data conversion, data editing and parameter setting.

## **References**

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