

**One Day National Seminar on
EMERGING TECHNOLOGIES IN LIBRARY SERVICES:
ISSUES AND CHALLENGE**

February 14, 2015



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ISBN: 978-81-908804-8-0

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TECHNICAL SESSION – 4**PARALLEL SESSION-(12.15 P.M. to 01.15 P.M)****VENUE: INNOVATIVE CENTRE****OPEN SOURCE TECHNOLOGIES**

S.No	Name of the Author	Title of the paper
ETLSOA1	Dr. Avineni kishore	Open Source Web Scale Discovery Tools for Present Library Services
ETLSOA2	Dr. V. Ramesh Babu & V. Franklin David Jebaraj	Open Access Institutional Repositories for Scholarly Communication
ETLSOA3	Mr. Gunjan and R. Patani	Open Source Software in Libraries
ETLSOA4	L.Asokan And V.Uma	Open Access Products: Issues and Challenges
ETLSOA5	M.Sathya and T.Stephen	Automation Of Department Library Using Open Biblio at Vellalar College For Women,Erode.
ETLSOA6	Manikandan.M	Open Access E-Resources In University Libraries
ETLSOA7	Manoj N & Venus. R	Open Source Software (Oss): Attributes, Advantages And Limitations
ETLSOA8	S.Duraisekar, and Dr.M.Palaniappan	Open Sources Software Development And Using The Library And Information Science Professionals
ETLSOA9	B.Srilakshmi and Dr. K. Sridhar	Open Source Software For Library Management
ETLSOA10	Dr.G.Ravi Sankar	Open Source Software For Medical/Non Medical Libraries: A Study
ETLSOA11	R.Vasanthi and Dr.N.Amsaveni	Status Of Open Access Repositories In Globe: A Quantitative Study
ETLSOA12	N.Rama Krishna, V. Srinivasa Rao and V.Kameswara Rao	"Free Access Web Based E-Resources and Software."
ETLSOA13	R.Umaiyaarubagam, Dr.B.Jeyapragash and J.M.John Anish	E-Granthalaya: Library Information Science Open Source Automation Software: An Overview
ETLSOA14	P.Ashok Kumar and K. Sivasekaran	Accessing E-Resources through Open Access: A Boon for Academic Libraries
ETLSOA15	Kannan	Open Source Software

ISBN: 978-81-908804-8-0

E-GRANTHALAYA: LIBRARY INFORMATION SCIENCE OPEN SOURCE AUTOMATION SOFTWARE: AN OVERVIEW

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J.M.John Anish
M.Phil Research Scholar

ABSTRACT

Generally the paper describes that overall Library software's availability on the website in free of cost. This software's are called open source software's. The open source software is available on three various dimensions of categories. These categories are the one is library automation Softwares, Second one is Digital Library softwares and integrated library system. We will see that elaborately on the following pages under given below on library Open Source Software detail manner.

Keywords:-OSS; LIS OSS; LAS; DLS; ILS; E-Granthalaya

1. What is open source?

Which sources are we will get it on the free of cost with useful and utilize for the carrier development is called Open sources. Whatever information (software Packages) are collecting from internet and do it for the installation on system to make them to survive on potentially is called open source software's. The open source softwares are abbreviated term is called OSS. The OSS are available on the source of information on particular websites only. Generally browsers, search engine and various form of information etc...,

Open source software is, software that users have the ability to run, copy, distribute, study, change, share and improve for any purpose. Open source library software's does not need the initial cost of commercial software and enables libraries to have greater control over their working environment

2. MEANING OF AUTOMATION:-

The word "automation" has been derived from Greek word "automose" means something, which has power of spontaneous motion or self-movement. The term "automation" was first introduced by D.S. Harder in 1936, who was then with General Motor Company in the U.S. He used the term automation to mean automatic handling of parts between progressive production processes.

According to Webster's Third New International Dictionary of English Languages, automation is, "the techniques of making an apparatus, a process or a system operate automatically". In other words, it is the machinery that mathematically manipulates information storing, selects, presents and records input data or internally generated data. Mechanization of

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library house-keeping operations predominantly by computers is known as library automation. (Gove, 1986).

According to Encyclopedia of Library and Information Science,“automation is the technology concerned with the design and development of process and system that minimize the necessity of human intervention in operation”. (Kent, 1977)

In this library automation software are available on open source and commercial. Some of the open source automation softwares are under given below;

Sl. No	Software Names	Type of software	Catagories of software	Websites Addresses	Version of thesoftwares in current	LINUX/ WINDOWS/ MAC
1.	KOHA	OSS	LAS	www.koha.org	3.0	Y
2.	E-GRANTHALAYA	OSS	LAS	http://egranthalaya.nic.in	3.0	N/Y/N
3.	Dura space	OSS	<i>DLS</i>	www.dspace.org	4.2	Y
4.	E-Prints	OSS	DLS	http://www.eprints.org/uk/	3.3.13	Y
5.	Greenstone	OSS	DLS	www.greenstone.org	2.86	Y
6.	PhpMyBibli	OSS	ILS	http://www.pmbservices.fr/	3.0	Y/Y/Y
7.	Evergreen	OSS	LAS	http://evergreen-ils.org	2.7 &2.6	Y

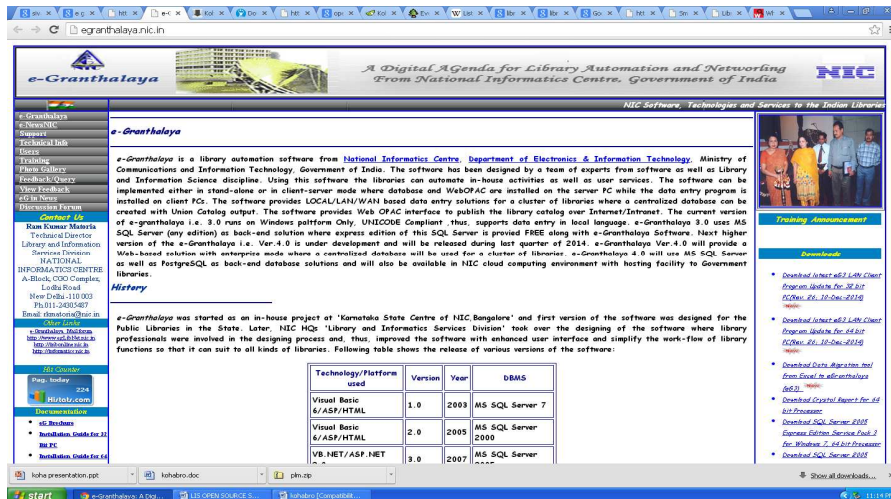
Above table some of the open source library software’s mentioned let as I take E-Granthalaya elaborative manner.

3. WHAT IS E-Granthalaya (<http://egranthalaya.nic.in>)

E-Granthalaya is library automation software from NIC, Department of Electronics & Information Technology, Ministry of Communications and Information Technology, Government of India. The software has been designed by a team of experts from software as well as Library and Information Science discipline. Using this software the libraries can automate in-house activities as well as user services.. The current version of e-granthalaya i.e. 3.0 runs on Windows paltform Only, UNICODE Compliant, thus, supports data entry in local language. E-Granthalaya 3.0 uses MS SQL Server (any edition) as back-end solution where express edition of this SQL Server is provied FREE along with e-Granthalaya Software. Next higher version of the e-Granthalaya i.e. Ver.4.0 is under development and will be released during last quarter of 2014.

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E-Granthalaya Ver.4.0 will provide a Web-based solution with enterprise mode where a centralized database will be used for a cluster of libraries. e-Granthalaya 4.0 will use MS SQL Server as well as PostgreSQL as back-end database solutions and will also be available in NIC cloud computing environment with hosting facility to Government libraries.



Library automation softwares are helpful to the following library housekeeping operations are

- Circulation
- Cataloguing
- Accession
- OPAC
- Data entry
- Bar coding works
- Gate entry
- Stock verification,etc

Above all the libraries works are made via system with software in the library are called LIS automation softwares.

4. System Requirements

4.1 For Stand-Alone Mode (All the Components to be installed on a Single PC):

Hardware: P IV or above with backup device, Min 1 GB RAM, 40GB HDD OS: Windows XP (SP2)/Vista/win 7/8

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DBMS: MS SQL Server 2005/2008/R2/2012 (any Edition/express Edition is FREE and given with e-Granthalaya CD)

Connectivity: LAN/Internet Connectivity

4.2 For Client-Server Mode:

- **Server PC:**
- **Hardware:** A Server Pc with Min 4GB RAM, 80GB HDD
- **OS:** Windows Client OS (Win 7/8) or Windows Server 2008/R2/2012 (Standard/Enterprise Edition)
- **RDBMS:** MS SQL Server 2005/2008/R2/2012 (Express Edition/Standard Edition/Any Other Edition)
- **Connectivity:** LAN/Internet Connectivity
- BarCode Printer (Any Model/Make) with Barcode Reader

4.3 Software Components

E-Granthalaya 3.0 contains following components, some of these are installed in the Server PC while rest of these are installed in the Client PCs:

- Database (MS SQL Server 2005/2008/R2/2012) - on Server PC (Windows xp/7/8/Server 2003/Server 2008/Latest)
- Web OPAC - on Server PC
- Data entry program (eG3 Client)- on client PCs

5. Features and implementation in libraries

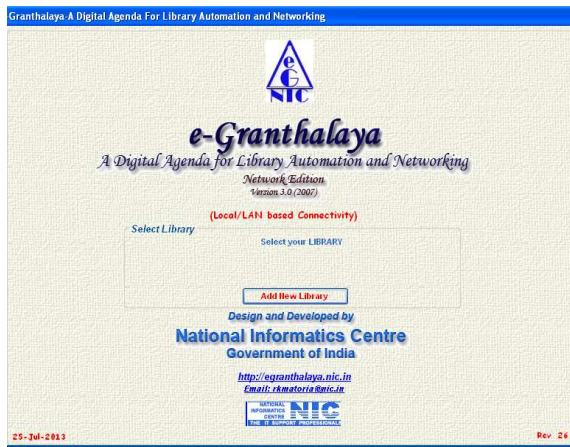
- Provides Local/LAN/WAN based Data Entry Solution
- UNICODE Compliant, supports data entry in local language
- Module - Wise Permission to the software Users
- Work-flow as per Indian Libraries
- Retro-Conversion as well as Full Cataloging Modes of Data Entry
- Authority Files/ Master tables for Authors, Publishers, Subjects, etc
- Multi-Vol, Multi-Copy and Child-Parent Relationship pattern
- Download Catalog Records from Internet
- Z39.50 Client Search Built-in
- Exhaustive Reports for Print

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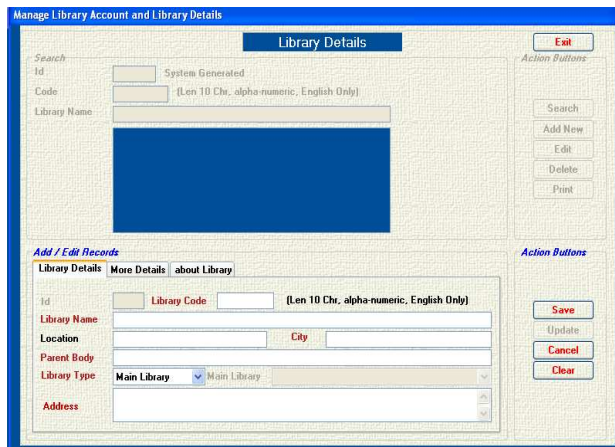
- Export Records in CSV/Text File/MARC 21/MARC XML/ISO:2709/MS ACCESS/EXCEL formats
- Merger databases of eG3 into Single Database
- Common/Centralized Database for All libraries under One Organization, minimize data entry
- Main/Branch Libraries Acquisition/Cataloging
- Print Accession Register
- Search Module built-in with basic/advance/boolean parameters
- Library Statistics Reports
- CAS/SDI Services and Documentation Bulletin
- Updated Regularly with enhanced Features
- Compact/Summary/Detailed Reports Option
- Generate Bibliography in AACR2
- Data Entry Statistics Built-In
- Full Text News Clipping Services Built-in
- Digital Library integration with uploading / downloading of pdf/html/Tiff, etc documents
- Micro-Documents Manger (Articles/Chapter Indexing)
- SERIALS Control System for Subscription with Auto-Generate Schedule
- Budget Modules with Bill Register Generation, manages Multi-Budget Head
- Import Data from any structured Source (MARC21/EXCEL)
- Well exhaustive Web Based OPAC Interface with separate Membership module
- Multi-copies of Accession No can be accessioned in bulk with single click with Auto-Accession Number.
- Manages e-Books with digital files in pdf or other formats, provides facilities of e-Book Viewer.
- Photo Gallery available for uploading photo and pictures of the organizations - published on the Library Web site.
- Manages Meta data for Non-Book Materials also. Includes database fields for Legal documents thus equally suitable to Law Libraries also.

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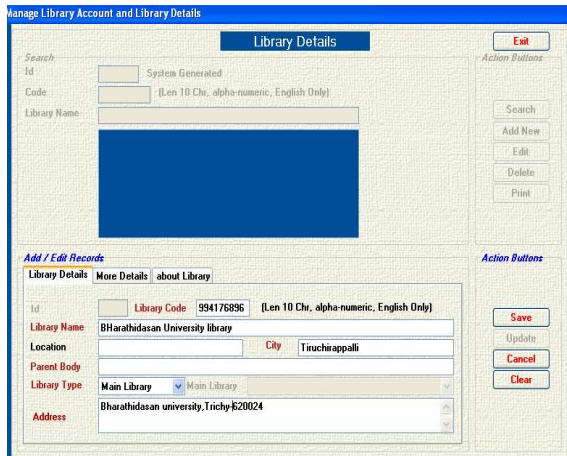
5.1 E Granthalaya Software DEMO via Screenshots:-



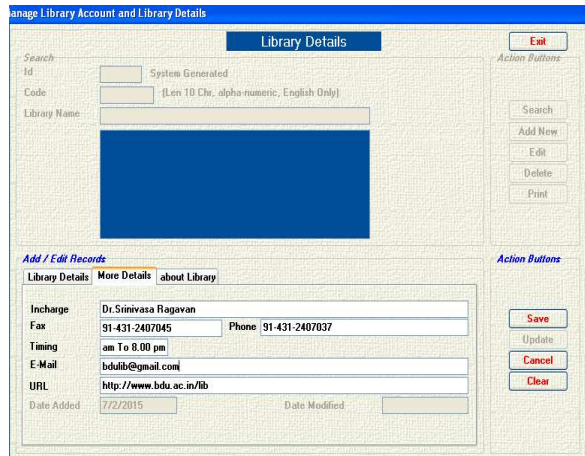
Pic: 1 Software first Window



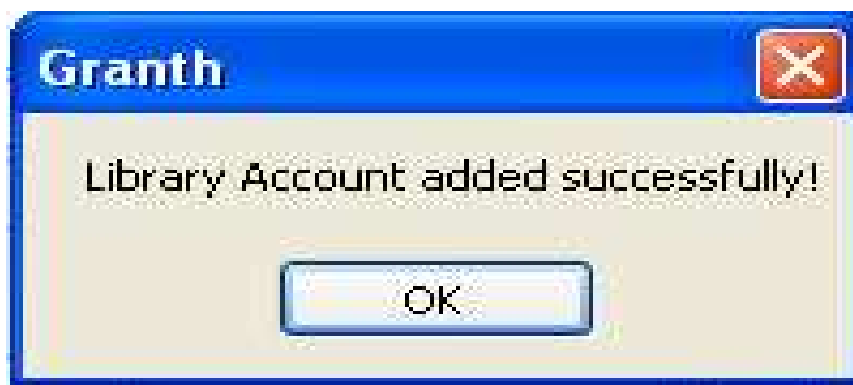
Pic: 2 Library Details



Pic: 3



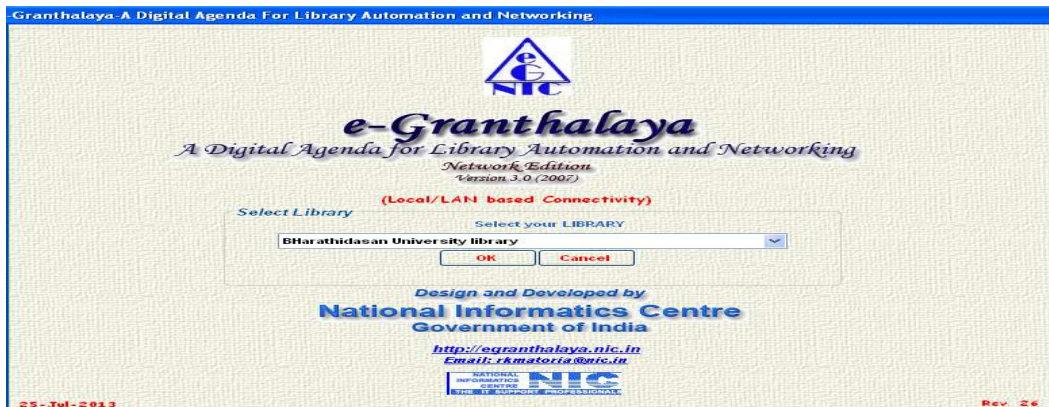
Pic:4



Pic:5

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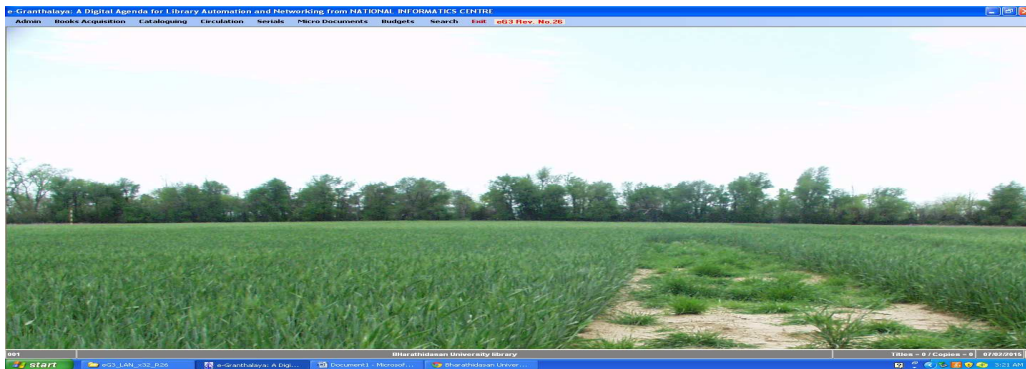
Pic:3,4,5 Above Screenshot are showing Library details Added Suceeffully



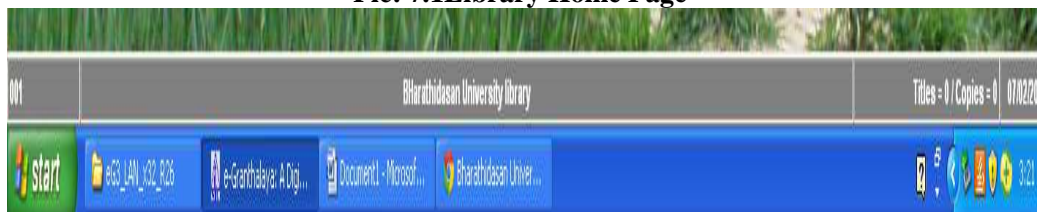
Pic 6:Library entering Screen



Pic:7 WELCOME SCREEN ON THE LEGEND BHARATHIDASAN UNIVERSITY LIBRARY



Pic: 7.1Library Home Page



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6. CONCLUSION:-

The E-granthalaya is limited to edit the software to use the MY-SQL formats to easily understandable to disseminate the information on the users to satisfaction and free of cost and maintaining the records via excel migration to software and utilize the small level academic libraries to compromising them on traditional to upgrade the modern digital world. Hopefully this article provides some introductory information as to how to wean your library off of traditional computing products and dive into the pool of open source resources available today.

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ISBN: 978-81-908804-8-0