A STUDY ON MANAGING KOHA OPEN SOURCE LIBRARY MANAGEMENT SYSTEM USING LIVE CD.

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Abstract
Koha Live CD's are useful tools for installation and learning purpose. Availability of Koha live CD is one of the reason that increased the popularity of Koha among library professionals. With the help of Koha Live CD, library professionals can try and install Koha without having much technical know how. It also saves considerable time for the installation of Koha software during training programmes.

Introduction
Koha is the first Open Source library management system and it was initially developed by Harowhenua Library Trust, New Zealand in 2000. Now the project has grown as one of the popular Open Source Library management system by large group of volunteers from various parts of the world. According to lib-web-cats [**1**] 1519 libraries are using Koha world wide (statistics retrieved on December 26, 2011). Marjory of libraries using Koha did not registered in the Lib-web-cats, therefore exact number of Koha users may go beyond the statistics. Following are the key features which place Koha first in priority list of library professionals [**2**]:

- Full-featured ILS
- Library standards compliant
- Web based interfaces
- Free software (Licensed under GNU General Public License)
- No Vendor Lock in
- Active development process
- Community decides what they want
- Frequent software releases

More than ten open source library management systems available, but very few of them popular in library automation market. Koha project started as a non-profit initiative and it strictly follows the principles of Open Source philosophy.

Problem statement
Open source Integrated Library Systems (ILS) are a new phenomenon in library automation industry. The main barrier between library professionals and Open Source software are lack of proper awareness and training. Library professionals' organizations and library science schools in India are not taking this as a serious concern. Librarians are getting only few opportunities to take part in awareness and training programmes in Open Source softwares. As the result, usage of Open Source software are very low in libraries.

Implementation of Open Source ILS is difficulty for library professionals because of its complex installation procedure. Most of the Open Source softwares suitable for libraries work only with Linux operating system. Installation of Open Source Library Management System in Linux operating system is not easy as like the installation of a user friendly Windows based softwares. Installation of Koha in libraries need either the help of an expert or the library professionals should acquire expertise in Linux operating system.

What is Koha Live CD
A "Live CD" is a bootable CD, which contains pre-configured software, this allows the user to be productive without accessing any other hard drives [**3**]. Users can run their favorite applications without installing it in the hard disk and without making any change in the host computers hard disk. Live CD's often contain an operating system and a bunch of selected application softwares. Live CD can give the feeling of using an installed operating system. Users can also use application softwares available with the live CD. In live mode user generated data and files can be saved in pendrive and thereis no need to store in the hard disk. Live CD's also allow users to permanently install the software in the computer.

Most of the live CD's available today are based on Linux operating system. Many of them are developed for test or demo of Linux operating system. User can try the operating system before install in the system. Other purposes are system repair and restoration. Ubuntu, Knoppix, Fedora and PC Linux OS, BSD Linux are popular live CD packages.

Koha live CD's contain Linux operating system and installed instance of Koha library management system. Koha package is pre installed in the CD and ready to use after the installation of live CD. It allows library professionals to test the software before taking decision on Koha implementation.

Following are the major Koha Live CD projects:

LibliveCD developed by Dr. A.R.D. Prasad, DRTC, Bangalore. This CD contain Koha, Dspace, PKP Harvester and many other tools useful for libraries. LibliveCD build on Ubuntu Linux.
Home page: http://sourceforge.net/projects/liblivecd/

KOHA GSDL Integrated -- LIVE CD is a customized Ubuntu LIVE CD having KOHA ILS , Greenstone Digital Library Software,DBWiz ,Sopac and wordpress pre-configured with the integration between the two. It also has mail server and client configured for the mail sending features of KOHA.
Home page: http://gsdlkohalive.sourceforge.net/

Koha Live CD is based on Ubuntu server edition. Most of the things are preconfigured.
Home page: http://sourceforge.net/projects/kohalivecd/

Koha Virtual Appliance is available as a VMDK image that is compatible with VMware products, VirtualBox, and other virtualization software [**4**]. This project started by Kyle Hall, leader of Mill Run Technology solutions from Unites States.

OSS Labs, one of the prominent Koha premium service provider from India. They build Koha Live CD based on OpenSuse Linux.
Home page: http://www.osslabs.biz/koha/livecd
Many Koha Live CD's are developing as part of training programmes organise by libraries and organisations. They also provided learning materials along with the Live CD.

Benefits
Koha Live CD is useful for both learning purpose and implementation in a real library environment. Following are the benefits of Koha Live CD:

- Bundled with Linux operating system,
- Suitable for trial without install inside the hard disk of the computer,
- User friendly installation,
- No need of high end Linux expertise for maintenance,
- Customised version of Koha is ready to use,
- Availability of third party applications (e.g. email client, database backup utility),
- Suitable for offline installation and no need of Internet connection for installation.

Organising workshops are more easier than before with the availability of Koha Live CD. Participants had to install Koha manually in workshop sessions and it would take too much time. It cut down the time for practicing Koha. Live CD helps participants to use Koha in virtual mode and no need to install Koha during workshop session. The same CD can make use for install Koha in their library.

Technical Aspects
Koha Live CD's are build using third party applications for creating customised Live CD / DVD based on Linux operating systems. Remastersys, Reconstructor and Ubuntu Customization Kit are examples of applications helpful for creating Live CD. Following are the steps involved in creating Koha Live CD:

1. Preparation of computer for Live CD creation,
2. Installation of Linux operating system,
3. Installation of Koha,
4. Adding third party applications (e.g. backup tools),
5. Running Live CD software and it make a clone of the system.

The process of the live CD making end with the creation of an ISO file. It can burn in a CD/DVD and ready for distribution. Installer inside the live CD help to install the replica of the Koha system in other computers.

Conclusion

Lot of utilities are available nowadays to build live CD. Installation of Koha was a tedious process and it prevented library professionals to try Koha Open Source library management system. Availability of Koha Live CD can make the installation process easy and save the time of the library professionals. Koha Live CD's are free and available in Internet for download. This is another reason of Koha is becoming more popular among library professionals and students.

References

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