LIBRARY INFORMATION SYSTEM

A STEP BY STEP KOHA MANUAL

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The manual is a learning resource material for Library Information System on open platform by using Koha software. For practical applications, the library data need to be brought in Koha and later the administrator and user can operate on Koha platform. The digitized material can be stored through database and eprint and very well integrated with Koha.
Foreword

India’s ability to provide for inclusive growth of its people in a globalizing world depends on its ability to create and sustain the competitive advantage of its agriculture. In an era when knowledge is becoming an increasingly significant factor of production in agriculture, this requires a massive endeavour for reforming the knowledge sector to enhance access to knowledge, reorganize the research and development infrastructure and improve education systems and delivery. Keeping this in view, the Indian Council of Agricultural Research (ICAR) launched, the National Agricultural Innovation Project (NAIP) as a pilot to transform the National Agricultural Research System (NARS) to a more pluralistic knowledge driven innovation system.

Libraries in institutions of NARS are massive depositories of formal knowledge with established procedures for storage and access of knowledge in physical form of print materials and also in digital form. The idea of digital, interconnected virtual libraries gained significant ground after the advent of the internet. The NAIP took advantage of this emerging technology (at that time) to introduce a massive component to strengthen information, communication and dissemination systems in NARS for improved access and wider knowledge sharing and interactions among the stakeholders. A significant part of this effort was the e-granth sub-project to create digital knowledge resources from repositories of libraries in research institutes and agricultural universities, and provide digital access to the resources to all stakeholders. Koha was the open source software platform chosen to create and access the knowledge resources.

Capacity building in the use of digital resources is also a significant project of the e-granth sub-project and also of the Learning and Capacity Building sub-project of NAIP. The latter is another massive and significant component of NAIP to build individual and institutional capacities to internalize a learning organization mode in NARS. The National Academy of Agricultural Research Management (NAARM) had been engaged in the past in training young scientists and faculty in the use of Library Information Systems. The Project Team at the Academy developed the digital Library of NAARM using Koha and
designed the training resources to enable non-specialists to use the digital resources effectively. The present Training Manual is the outcome of this effort.

I congratulate Dr SK Soam and the Project Team members in this innovative effort to make library resources accessible to all. I am sure that the Manual would prove extremely useful, particularly to the young scientists, faculty and students. It would also be useful to other Librarians who can adapt this to scale up the knowledge access and use to a much wider range of stakeholders in their institutions.

NH Rao
Principal Scientist and
Principal investigator
Preface

Indian Council of Agricultural Research under World Bank supported National Agricultural Innovation Project (NAIP) initiated ‘eGranth Project’ to digitize the library resources and also to develop management information system based on open source software called ‘Koha’. Several ICAR institutes and SAUs were the partners in this project. As a project partner, NAARM converted complete data and integrated to ‘Koha’, and digitization of documents were also done. The digitized records are maintained at central server called ‘KrishiKosh’, which is accessible through ICAR website.

The library management through ‘Koha’ has immense benefits such as circulation of books with email alerts to the users, maintaining the record of reading history of the books and journals, keeping the records of arrivals of books, journals and magazines. It provide several benefits at user side also such as dates of checkout and check ins, past record, email alerts, status of indents, information about arrivals and availability of books and journals and certain other benefits in my account.

In view of the utility of the ‘Koha’, it was decided that under NAIP L&CB project, as a capacity building initiative a step-by-step manual to be prepared so that training on Koha could be started and it strengthens the complete NARS setup. The manual would be used as training resource and a user friendly document, which helps as post training support for the application of Koha in their libraries. The manual provides complete information from installation of Debian to all provisions related to administrator and users of ‘Koha’.

The Authors place on record the cooperation and guidance provided by Dr S.L. Goswami, Director, NAARM, Dr A.K. Jain, CCPI of Strengthening of Digital Library and Information Management in NARS (eGranth), and Dr N.H. Rao, the Principal Investigator of NAIP, L&CB project.

Hyderabad

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INSTALLING DEBIAN OPERATING SYSTEM

What is Debian?
Debian is an operating system based on the GNU/Linux build. An operating system is the set of basic programs and utilities that make your computer run. At the core of an operating system is the kernel. The kernel is the most fundamental program on the computer and does all the basic housekeeping and lets you start other programs. The Debian operating system, like most other Linux distributions, is free and open source. It is a popular operating system for both desktop and server use. The development and distribution of Debian is handled by a non-profit organization, and the operating system can be downloaded free of charge from their website. Learning how to install Debian is a relatively straightforward process requiring an Internet connection, disk imaging software, and a blank CD.

What Hardware is Supported?
Debian will run on almost all personal computers, including older models. Each new release of Debian generally supports a larger number of computer architectures.
Debian 7.4 was released February 8th, 2014. Debian 7.0 was initially released on May 4th, 2013.
The following computer architectures are supported in this release:

- 64-bit PC (amd64)
- 32-bit PC (i386)
- EABI ARM
- PowerPC
- Hard Float AB\ ARM
- SPARC
- kFreeBSD 64-bit PC (amd64)
- Intel Itanium IA-64
- MIPS (little endian)
- kFreeBSD 32-bit PC (i386)
- IBM S/390
- MIPS (big endian)
- IBM System z

Here’s a Road Map for the Steps you will take During the installation Process.

1. Back up any existing data or documents on the hard disk where you plan to install.
2. Gather information about your computer and any needed documentation, before starting the installation.
3. Locate and/or download the installer software and any specialized driver or firmware files your machine requires.
4. Set up boot media such as CDs/DVDs/USB sticks or provide a network boot infrastructure from which the installer can be booted.
5. Boot the installation system.
6. Select the installation language.
7. Activate the Ethernet network connection, if available.
8. If necessary, resize existing partitions on your target hard disk to make space for the installation.
9. Create and mount the partitions on which Debian will be installed.
10. Watch the automatic download/install/setup of the base system.
11. Install a boot loader which can start up Debian GNU/Linux and/or your existing system.
12. Load the newly installed system for the first time.
Installing Debian, Step by Step

Step 1:
Download the latest debian .iso image from
http://www.debian.org/releases/stable/debian-installer/ using your preferred method the stable release amd64 version of CD1. The disc image we are using in this guide is debian-cd/7.4.0/amd64/iso-dvd

Figure 1: Download .iso image

Step 2:
Using your disc burning software, burn the .iso you downloaded to a CD.

Step 3:
Ensure you have a network cable connected, restart your computer, and boot from the CD drive. Back up any important files on your computer. Installing Debian on your machine will clear your entire hard drive and reformat it, erasing all data in the process. Store your important information on a removable drive before beginning the installation.

Step 4: Booting and Starting the Installer

Once the BIOS have begun booting from the CD or DVD-ROM, the Isolinux
bootloader menu appears.

For a standard installation, you only need to choose “Install” or “Graphical install” (with the arrow keys), then press the Enter key to initiate the remainder of the installation process.

If the computer is already running Windows, it is not necessary to delete the system in order to install Debian. You can have both systems at once; each installed on a separate disk or partition, and choose which to start when booting the computer. This configuration is often called ‘dual boot’, and the Debian installation system can set it up. This is done during the hard drive partitioning stage of installation and while setting up the boot loader.

The “expert” mode (accessible in the “Advanced Options” menu) details all possible options in the process of installation, and allows navigation between the various steps.

![Debian GNU/Linux installer boot menu](image)

**Figure 2: Boot screen**

Once booted, the installation program guides you step by step throughout the process. We will also address installation in graphical mode, but the only difference from “classic” (text-mode) installation is in the visual appearance.
Step 5: Selecting the Language

The installation program begins in English. This step allows you to choose the language that will be used in the rest of the process. Choosing French, for example, will provide an installation entirely translated into French (and a system configured in French as a result).

<table>
<thead>
<tr>
<th>Language</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chinese (Simplified)</td>
<td>中文(简体)</td>
</tr>
<tr>
<td>Chinese (Traditional)</td>
<td>中文(繁體)</td>
</tr>
<tr>
<td>Croatian</td>
<td>Hrvatski</td>
</tr>
<tr>
<td>Czech</td>
<td>Čeština</td>
</tr>
<tr>
<td>Danish</td>
<td>Dansk</td>
</tr>
<tr>
<td>Dutch</td>
<td>Nederlands</td>
</tr>
<tr>
<td>Dzongkha</td>
<td>དོན་ཁ།</td>
</tr>
<tr>
<td>English</td>
<td>English</td>
</tr>
<tr>
<td>Esperanto</td>
<td>Esperanto</td>
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<tr>
<td>Estonian</td>
<td>Eesti</td>
</tr>
<tr>
<td>Finnish</td>
<td>Suomi</td>
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<tr>
<td>French</td>
<td>Français</td>
</tr>
<tr>
<td>Galician</td>
<td>Galego</td>
</tr>
<tr>
<td>Georgian</td>
<td>ქართული</td>
</tr>
<tr>
<td>German</td>
<td>Deutsch</td>
</tr>
<tr>
<td>Greek</td>
<td>Ελληνικά</td>
</tr>
</tbody>
</table>

Figure 3: Selecting the language
Step 6: Selecting the Country

Select your location

The selected location will be used to set your time zone and also for example to help select the system locale. Normally this should be the country where you live.

This is a shortlist of locations based on the language you selected. Choose "other" if your location is not listed.

Country, territory or area:

- Canada
- Hong Kong
- India
- Ireland
- New Zealand
- Nigeria
- Philippines
- Singapore
- South Africa
- United Kingdom
- United States
- Zambia
- Zimbabwe
- other

Figure 4: Selecting the country
Step 7: Selecting the Keyboard Layout

The proposed “American English” keyboard corresponds to the usual QWERTY layout.
Step 8: Detecting Hardware

The installer detects your hardware, and tries to identify the DVD-ROM drive used in order to access its content. It loads the modules corresponding to the various hardware components detected, and then “mounts” the DVD-ROM in order to read it. The previous steps were completely contained in the boot image included on the DVD, a file of limited size and loaded into memory by the BIOS when booting from the DVD.

Step 9: Loading Components

The installer loads all the files. This includes additional drivers for the remaining as well as all the components of the installation program.

Step 10: Detecting Network Hardware

This step automatically identifies the network card and loads the corresponding module. If automatic detection fails, you can manually select the module to load. If no module works, it is possible to load a specific module from a removable device. This last solution is usually only needed if the appropriate driver is not included in the standard Linux kernel, but available elsewhere, such as the manufacturer’s website.

Step 11: Configuring the Network

The installer attempts an automatic network configuration by DHCP (for IPv4) and by IPv6 network discovery. If this fails, it offers more choices: try again with a normal DHCP configuration, attempt DHCP configuration by declaring the name of the machine, or set up a static network configuration.

This last option requires an IP address, a subnet mask, an IP address for a potential gateway, a machine name, and a domain name.

Step 12: Configuring the Clock

If the network is available, the system’s internal clock is updated from an NTP server.

Step 13: Administrator Password

The super-user root account, reserved for the machine’s administrator, is automatically created during installation; this is why a password is requested.
Set up users and passwords

You need to set a password for 'root', the system administrative account. A malicious or unqualified user with root access can have disastrous results, so you should take care to choose a root password that is not easy to guess. It should not be a word found in dictionaries, or a word that could be easily associated with you.

A good password will contain a mixture of letters, numbers and punctuations and should be changed at regular intervals.

The root user should not have an empty password. If you leave this empty, the root account will be disabled and the system's initial user account will be given the power to become root using the 'sudo' command.

Note that you will not be able to see the password as you type it.

Root password:

Please enter the same root password again to verify that you have typed it correctly.

Re-enter password to verify:

Figure 6: Administrator password

Step 14: Creating the First User

The installer will ask for the complete name of this first user, their username, and their password (twice, to prevent the risk of erroneous input).

Set up users and passwords

A user account will be created for you to use instead of the root account for non-administrative activities.

Please enter the real name of this user. This information will be used for instance as default origin for emails sent by this user as well as any program which displays or uses the user's real name. Your full name is a reasonable choice.

Full name for the new user:

Roland Max

Figure 7: Name of the first user
Step 15: Detecting Disks and Other Devices

This step automatically detects the hard drives on which Debian may be installed. They will be presented in the next step: partitioning.

Step 16: Starting the Partitioning Tool

It is necessary to define the various portions of the disks (or “partitions”) on which the Linux files systems and virtual memory (swap) will be stored.

The partitioning software has a “guided” mode which recommends partitions for the user to make.

Partition disks

The installer can guide you through partitioning a disk (using different standard schemes) or, if you prefer, you can do it manually. With guided partitioning you will still have a chance later to review and customise the results.

If you choose guided partitioning for an entire disk, you will next be asked which disk should be used.

Partitioning method:

- Guided - use entire disk
- Guided - use entire disk and set up LVM
- Guided - use entire disk and set up encrypted LVM
- Manual

Figure 8: Choice of partitioning mode

The first screen in the partitioning tool offers the choice of using an entire hard drive to create various partitions. For a (new) computer which will solely use Linux, this option is clearly the simplest and you can choose the option “Guided - use entire disk”. If the computer has two hard drives for two operating systems, setting one drive for each is also a solution that can facilitate partitioning. In both of these cases, the next screen offers to choose the disk where Linux will be installed by selecting the corresponding entry (for example, “SCSI1 (0, 0, 0) (sda) - 12.9 GB ATA VBOX HARDDISK”). You then start guided partitioning.
Partition disks

Note that all data on the disk you select will be erased, but not before you have confirmed that you really want to make the changes.

Select disk to partition:

SCSI (0,0,0) (sda) - 12.0 GB ATA VBOX HARDISK

Figure 9: Disk to use for guided partitioning

Guided Partitioning

The guided partitioning tool offers three partitioning methods, which correspond to different usages.

Selected for partitioning:

SCSI (0,0,0) (sda) - ATA VBOX HARDISK: 12.9 GB

The disk can be partitioned using one of several different schemes. If you are unsure, choose the first one.

Partitioning scheme:

All files in one partition (recommended for new users)
Separate /home partition
Separate /home, /usr, /var, and /tmp partitions

Figure 10: Guided partitioning
The **first method** is called “All files in one partition”. The entire Linux system tree is stored in a single file system, corresponding to the root (/) directory. In fact, two partitions will be created: the first will house the complete system, the second the virtual memory (swap).

The **second method**, “Separate /home/ partition”, is similar, but splits the file hierarchy in two: one partition contains the Linux system (/), and the second contains “home directories” (meaning user data, in files and subdirectories available under /home/).

The **last partitioning** method, called “Separate /home, /usr, /var, and /tmp partitions. It divides the file tree into many partitions: in addition to the root (/) and user accounts (/home/) partitions, it also has partitions for applications (/usr/), server software data (/var/), and temporary files (/tmp/).

After choosing the type of partition, the software calculates a suggestion, and describes it on the screen; the user can then modify it if needed. You can, in particular, choose another file system if the standard choice (ext4) isn’t appropriate.

Select the **Finish partitioning and write changes to disk** entry.
Manual Partitioning

Manual partitioning allows the user to choose the purpose and size of each partition. The first screen displays the available disks, their partitions, and any possible free space that has not yet been partitioned. You can select each displayed element; pressing the Enter key then gives a list of possible actions.

You can erase all partitions on a disk by selecting it. When selecting free space on a disk, you can manually create a new partition. You can also do this with guided partitioning, which is an interesting solution for a disk that already contains another operating system, but which you may wish to partition for Linux in a standard manner. See the previous section for more details on guided partitioning.

When choosing a partition, you can indicate the manner in which you are going to use it:

- Format it and include it in the file tree by choosing a mount point;
- Use it as a swap partition;
- Make it into a “physical volume for encryption” (to protect the confidentiality of data on certain partitions, see below);
- Make it a “physical volume for LVM” (this concept is discussed in greater detail later in this chapter);
- Use it as a RAID device (see later in this chapter);
- Or the choice not to use it, and therefore leave it unchanged.

Configuring Multi-disk Devices (Software RAID)

Some types of RAID allow the duplication of information stored on hard drives to prevent data loss in the event of a hardware problem affecting one of them. Level 1 RAID keeps a simple, identical copy (mirror) of a hard drive on another drive, while level 5 RAID splits redundant data over several disks, thus allowing the complete reconstruction of a failing drive.

We will only describe level 1 RAID, which is the simplest to implement. The first step involves creating two partitions of identical size located on two different hard drives, and to label them “physical volume for RAID”.

You must then choose “Configure software RAID” in the partitioning tool to
combine these two partitions into a new virtual disk and select “Create MD device” in the configuration screen. You then need to answer a series of questions about this new device. The first question asks about the RAID level to use, which in our case will be “RAID1”. The second question asks about the number of active devices—two in our case, which is the number of partitions that needs to be included in this MD device. The third question is about the number of spare devices—0; we have not planned any additional disk to take over for a possible defective disk. The last question requires you to choose the partitions for the RAID device—these would be the two that we have set aside for this purpose (make sure you only select the partitions that explicitly mention “raid”).

Back to the main menu, a new virtual “RAID” disk appears. This disk is presented with a single partition which cannot be deleted, but whose use we can choose (just like for any other partition).

**Configuring the Logical Volume Manager (LVM)**

LVM allows you to create “virtual” partitions that span over several disks. LVM uses a particular terminology: a virtual partition is a “logical volume”, which is part of a “volume group”, or an association of several “physical volumes”. Each of these terms in fact corresponds to a “real” partition (or a software RAID device).

This technique works in a very simple way: each volume, whether physical or logical, is split into blocks of the same size, which are made to correspond by LVM. The addition of a new disk will cause the creation of a new physical volume, and these new blocks can be associated to any volume group. All of the partitions in the volume group that is thus expanded will have additional space into which they can extend.

The partitioning tool configures LVM in several steps. First you must create on the existing disks the partitions that will be “physical volumes for LVM”. To activate LVM, you need to choose “Configure the Logical Volume Manager (LVM)”, and then on the same configuration screen “Create a volume group”, to which you will associate the existing physical volumes. Finally, you can create logical volumes within this volume group. Note that the automatic partitioning system can perform all these steps automatically.

In the partitioning menu, each physical volume will appear as a disk with a single partition which cannot be deleted, but that you can use as desired.
Setting up Encrypted Partitions

To guarantee the confidentiality of your data, for instance in the event of the loss or theft of your computer or a hard drive, it is possible to encrypt the data on some partitions. This feature can be added underneath any file system, since, as for LVM, Linux (and more particularly the dm-crypt driver) uses the Device Mapper to create a virtual partition (whose content is protected) based on an underlying partition that will store the data in an encrypted form (LUKS, Linux Unified Key Setup, a standard format that enables the storage of encrypted data as well as meta-information that indicates the encryption algorithms used).

To create an encrypted partition, you must first assign an available partition for this purpose. To do so, select a partition and indicate that it is to be used as a “physical volume for encryption”. After partitioning the disk containing the physical volume to be made, choose “Configure encrypted volumes”. The software will then propose to initialize the physical volume with random data (making the localization of the real data more difficult), and will ask you to enter an “encryption passphrase”, which you will have to enter every time you boot your computer in order to access the content of the encrypted partition. Once this step has been completed, and you have returned to the partitioning tool menu, a new partition will be available in an “encrypted volume”, which you can then configure just like any other partition. In most cases, this partition is used as a physical volume for LVM so as to protect several partitions (LVM logical volumes) with the same encryption key, including the swap partition.

Step 17: Installing the Base System

This step, which doesn't require any user interaction, installs the Debian “base system” packages. This includes the DPKG and APT tools, which manage Debian packages, as well as the utilities necessary to boot the system and start using it.
Step 18: Configuring the Package Manager (APT)

In order to be able to install additional software, APT needs to be configured and told where to find Debian packages. This step is as automated as possible. It starts with a question asking if it must use a network source for packages, or if it should only look for packages on the CD-ROM.

If getting packages from the network is requested, the next two questions allow to choose a server from which to download these packages, by choosing first a country, then a mirror available in that country (a mirror is a public server hosting copies of all the files of the Debian master archive).
Configure the package manager

Please select a Debian archive mirror. You should use a mirror in your country or region if you do not know which mirror has the best Internet connection to you.

Usually, ftp.<your country code>.debian.org is a good choice.

Debian archive mirror:

- ftp.us.debian.org
- ftp.egc.msu.edu
- mirrors.kernel.org
- debian.lcs.mit.edu
- debian.osuosl.org
- ftp-nyc.osuosl.org
- ftp-chi.osuosl.org
- mirror.cc.columbia.edu
- mirror.hmc.edu
- mirror.and.hawaii.edu
- debian.cc.lehigh.edu
- mirror.mycre.ws
- debian.gisc.gatech.edu
- cdn.debian.net
- ftp.glib.gatech.edu

Figure 13: Selecting a debian mirror

Finally, the program proposes to use an HTTP proxy. If there is no proxy, Internet access will be direct. If you type http://proxy.falcot.com:3128, APT will use the falcot proxy/cache, a Squid program. You can find these settings by checking the configurations of a web browser on another machine connected to the same network.

The files Packages.gz and Sources.gz are then automatically downloaded to update the list of packages recognized by APT.

Step 19: Debian Package Popularity Contest

The Debian system contains a package called popularity-contest, whose purpose is to compile package usage statistics. Each week, this program collects information on the packages installed and those used recently, and anonymously send this information to the Debian project servers. The project can then use this information to determine the relative importance of each package, which influences the priority that will be granted to them. In particular, the most “popular” packages will be included in the installation CD-ROM, which will facilitate their access for users who do not wish to download them or to purchase a complete set. This package is only activated on demand, out of respect for the confidentiality of users’ usage.
Step 20: Selecting Packages for Installation

The following step allows you to choose the purpose of the machine in very broad terms; the ten suggested tasks correspond to lists of packages to be installed. Some packages are also automatically installed according to the hardware detected.

Step 21: Installing the GRUB Bootloader

---

**Figure 14: Task choices**

The bootloader is the first program started by the BIOS. This program loads the Linux kernel into memory and then executes it.

By default, the menu proposed by GRUB contains all the installed Linux kernels, as well as any other operating systems that were detected. This is why you should accept the offer to install it in the Master Boot Record.

Step 22: Finishing the Installation and Rebooting

The installation is now complete. The program invites you to remove the CD-ROM from the reader and to restart the computer.
INSTALLING KOHA

After successful installation of Debian you can use the following commands to install KOHA

**Step 1:**

First open the Terminal.

Go to Applications → Accessories → Terminal.

![Open terminal](image)

*Figure 1: Open terminal*
Step 2:
Login with root user. For that use the following command

\texttt{bhavya@debian:~ $ su}

\textbf{Password:}

\begin{figure}
\centering
\includegraphics[width=\textwidth]{login.png}
\caption{Root user login}
\end{figure}

\textbf{Step 3:}
Set the debian mirror. Debian is distributed all around the world using these mirrors in order to provide users with better access to their archive and to reduce the load on their server.

- You can find debian mirrors list from here
  \texttt{http://www.debian.org/mirror/list}
- To set debian mirror you have to edit \texttt{/etc/apt/sources.list} file. For that you can use any linux editor. For e.g here we are using ‘nano’ editor.
- First open this file by using following command.

\begin{verbatim}
root@debian:/home/bhavya# nano /etc/apt/sources.list (press enter)
\end{verbatim}

\begin{figure}
\centering
\includegraphics[width=\textwidth]{sources_list.png}
\caption{Open /etc/apt/sources.list}
\end{figure}
Now add any debian mirror to this file. You can use any debian mirror from the above link. For e.g. we are using the following mirror.

http://debian.mirror.net.in/debian

To use this mirror we have to add the following line in /etc/apt/sources.list file.

deb http://debian.mirror.net.in/debian wheezy main contrib

Figure 4: /etc/apt/sources list file
Press Ctrl + x for exit & after that press y and then enter to save the changes.

Figure 5: Save and exit
Step 4:

Create `/etc/apt/sources.list.d/koha.list` file. For that use the following.

```
root@debian:/home/bhavya# nano /etc/apt/sources.list.d / koha.list
```

(press enter)

![Figure 6: File creation](image)

- Add the following line to this file:

  ```
  deb http://debian.koha-community.org/koha squeeze main
  ```

- To exit press Ctrl+x and press y and then enter to save this file.

![Figure 7: Save and exit](image)
Step 5:

Add the key in gpg.asc to your APT trusted keys. Type the following command to your terminal.

```
root@debian:/home/bhavya# wget -O- http://debian.koha-community.org/koha/gpg.asc | sudo apt-key add --
```

![Figure 8: Add gpg.asc key](image)

Step 6:

Update the repository. Use the following command for update.

```
root@debian:/home/bhavya# apt-get update (press enter)
```

![Figure 9: Update repository](image)
Step 7:

Now install koha. You can install it by koha-common package

```
root@debian:/home/bhavya# apt-get install koha-common (press enter)
```

![Figure 10: Install koha](image)

- You can also read `/usr/share/doc/koha-common/README.Debian` file for post installation configuration of koha. (Optional)
- To read this file, you can use following command.
  `root@debian:/home/bhavya# less /usr/share/doc/koha-common / README.Debian (press enter)`
- To exit from this file press q.

![Figure 11: Open README.Debian file](image)
Step 8:

To access koha you can follow any one of these steps:

(i) Create /etc/koha/koha-sites.conf file

OR

(ii) Access OPAC on port 80 and Staff client on port 8080.

(i) Create /etc/koha/koha-sites.conf file

➢ To configure your server for use with DNS names: After install, edit /etc/koha/koha-sites.conf with details about your site. You may need to create this file.

➢ For that use the following command.

```
root@debian:/home/bhavya# nano /etc/koha/koha-sites.conf (press enter)
```

Figure 13: Open /etc/koha/koha-sites.conf file
Some example content of /etc/koha/koha-sites.conf would be:

```
DOMAIN=""  # Any library instance will be a subdomain of this string.
INTRAPORT="80"  # Any library instance will be a subdomain of this string.
INTRAPREFIX=""  # For administration interface URL: Prefix to be added to the instance name.
INTRASUFFIX="admin"  # For administration interface URL: Suffix to be added to the instance name.
DEFAULTSQL=""  # only needed if you're pre-populating from another Koha database.
OPACPREFIX=""  # For users' interface URL: Prefix to be added to the instance name.
INTRAPORT=""  # TCP listening port for the administration interface
INTRAPREFIX=""  # For administration interface URL: Prefix to be added to the instance name.
ZEBRA_LANGUAGE="en"  # Primary language for Zebra indexing. Possible values are 'en', 'fr' and 'nb'.
```

Add the above lines to this file.

![GNU nano 2.2.6 File: ...koha/koha-sites.conf Modified](image)

Figure 14: Open /etc/koha/koha-sites.conf file
Now to exit press Ctrl+x and press y and then press enter to save this file.

Figure 15: Save and exit

(ii) Access OPAC on port 80 and Staff client on port 8080.

If you don't need above DNS configuration and want to access Koha via your IP or localhost only (often done for test installations), you can skip creating /etc/koha/kohasites.conf file and you will get default values (OPAC on port 80 and Staff client on port 8080). For that you have to change port number in /etc/apache2/ports.conf file. For that Open /etc/apache2/ports.conf file and add Listen 8080

root@debian:/home/bhavya# nano /etc/apache2/ports.conf (press enter)

Figure 16: Open /etc/apache2/ports.conf
Add Listen 8080 in this file after NameVirtualHost *:80

```
GNU nano 2.2.6  File: /etc/apache2/ports.conf

# If you just change the port or add more ports here, you will $ # have to change the VirtualHost statement in # /etc/apache2/sites-enabled/000-default # This is also true if you have upgraded from before 2.2.9-3 (i$ # Debian etch). See /usr/share/doc/apache2.2-common/NEWS.Debian$ # README.Debian.gz

NameVirtualHost *:80
Listen 8080
Listen 80

<IfModule mod_ssl.c>
  # If you add NameVirtualHost *:443 here, you will also have$

Figure 17: Add listen 8080

Save and exit from this file.

```

```
GNU nano 2.2.6  File: /etc/apache2/ports.conf  Modified

# If you just change the port or add more ports here, you will $ # have to change the VirtualHost statement in # /etc/apache2/sites-enabled/000-default # This is also true if you have upgraded from before 2.2.9-3 (i$ # Debian etch). See /usr/share/doc/apache2.2-common/NEWS.Debian$ # README.Debian.gz

Listen 8080
Listen 80

<IfModule mod_ssl.c>

Figure 18: Save and exit
Step 9:

Next, you will need to enable the Apache mod_rewrite module and disable default mode.

```
root@debian:/home/bhavya# a2enmod rewrite (press enter)
```

![Figure 19: Enable rewrite](image)

```
root@debian:/home/bhavya# a2dissite 000-default (press enter)
```

![Figure 20: Disable default](image)

Step 10:

Then you have to restart apache server.

```
root@debian:/home/bhavya# /etc/init.d/apache2 restart (press enter)
```

![Figure 21: Restart apache](image)
Step 11:

If you are planning to run MySqI on the same server as you are running Koha on, then make sure you install it by using following:

```
root@debian:/home/bhavya# apt-get install mysql-server (press enter)
```

![MySQL installation output]

**Figure 22: Install MySql**

Press y to continue

Create password for mysql-server when screen will appear for input password.

If you're planning to run MySQL on a separate server, please do not run koha-create --create-db instancename as mentioned below.

**Step 12: Creating Koha Instance**

Now you need to create your first koha instance.

```
root@debian:/home/bhavya# koha-create --create-db instancename (press enter)
```
root@debian:~# koha-create --create-db koha
Koha instance is empty, no staff user created.
Enabling site koha.
To activate the new configuration, you need to run:
  service apache2 reload
[....] Restarting web server: apache2[Wed Sep 11 12:02:51 2013] [warn] _default_VirtualHost overlap on port 8080, the first has precedence
[Wed Sep 11 12:02:51 2013] [warn] _default_VirtualHost overlap on port 8080, the first has precedence
... waiting [Wed Sep 11 12:02:52 2013] [warn] _default_VirtualHost overlap on port 8080, the first has precedence
[Wed Sep 11 12:02:52 2013] [warn] _default_VirtualHost overlap on port 8080, the first has precedence

Figure 23: Create instance

Step 13:

Now you can visit your administration website to continue with the Koha web installer.

For that you can use any web-browser. For e.g. we are using iceweasel web browser here.

Go to Applications > internet > iceweasel
Figure 24: Open Iceweasel

Use the following URL to access Web-Insaller.

http://127.0.0.1:8080 (if you have not created /etc/koha/koha-sites.conf)

Figure 25: Web Installer
OR

To run web-installer using ServerName. Add ServerName to /etc/hosts file.

Your ServerName for Koha Staff Client is your instancename and for OPAC it is <instancename><intrasuffix>

To edit /etc/hosts file use the following command

root@debian:/home/bhavya# nano /etc/hosts (press enter)

![Image of nano editor]

**Figure 26: Open /etc/hosts**

Now add your servername above all nodes and all routers line. For e.g. we have added

127.0.0.1 koha
127.0.0.1 kohadmin

![Image of /etc/hosts file]

**Figure 27: Add server name**
Now save and exit from this file.

Use the following URL to access Web-Insaller.

http://instancename/ (if you have created /etc/koha/koha-sites.conf file)

Figure 28: Web installer

- The username to log in with will be kohainstancename and the password will be near the end of the following file.
- /etc/koha/sites/instancename/koha-conf.xml
- To view the password. Open this file by using any editor and search the following line.
- You will get your password in between <pass> </pass> tag. For e.g. here username is
- koha_koha and password is HERSPXKrHQ9nQ1FH
- Open /etc/koha/sites/ file.

root@debian:/home/bhavya# nano /etc/koha/sites/instancename/koha-conf.xml (press enter)
Step 14: Configuring Your Koha Instance

Login with user koha_instance name and with password you have got from /etc/koha/sites/koha-conf.xml file.
Figure 31: Login web installer

Figure 32: Web installer step 1
Figure 33: Continue step 1

Figure 34: Web installer Step 2
Figure 35: Step 2 continue

Figure 36: Web installer Step 3
Step through the web installer selecting default values except MARC flavor, no default given, use Marc21.

![Image of the web installer step 3]

**Figure 37: Select marc flavour**

On the “MARC Frameworks: MARC21” setting page, set the 3 optional items:

- marc21_default_matching_rules
- marc21_fastadd_framework
- marc21_simple_bib_frameworks
Figure 38: Set optional values

At the bottom of optional section enable:

auth_val

parameters

sample_itemtypes

sample_z3950_servers options
Figure 39: Set bottom optional values  
Click on import.

Figure 40: Step 3 continue
Click on finish button.

Figure 41: Step 3 continue

Once you finish it will automatically launch Staff Interface. After, you will see the login screen
Figure 42: After login

To access OPAC use

http://127.0.0.1:80 (if /etc/koha/koha-sites.conf file is not created)

OR

http://<instanenname><intrasuffix>/ (if /etc/koha/koha-sites.conf file is created)

intrasuffix= you created in /etc/koha/koha-sites.conf file

Figure 43: OPAC screen
DATA MIGRATION (LIBSYS TO EXCEL)

KOHA is widely used open-source integrated library management software. The advantages associated with the use of open source software make it desirable to supplant proprietary library management software’s (like Libsys) with KOHA.

The migration from one fully-fledged running software of any kind to another software is always a great challenge, particularly from proprietary software to open source software.

The data migration procedure from Libsys to Koha is done by the following steps.

Step 1: Open LIBSYS
Step 2: Open Libsys > Cataloguing > Data import/Export > Develop File

Click on Develop file. In this step we are developing a file with the required fields.

Step 3:

Mention the name to the file and click on OK button.
Step 4:
Click on ADD button.

Step 5:
Specify the range of Accession numbers (The Accession number of books which we are exporting) and click on OK button.

This step develops a text file covering all the fields in the catalogue.

Step 6:
Open Libsys > Cataloguing > Data Import/Export > Data Export

Mention the name of the input data file (developed text file name) and give the output format as Variable text. The type of input file should be “Developed”.

Click on OK button.
Step 7:

Specify the type of the documents by clicking on 'Documents'. You can even change the name of your output file here.
Step 8:

Choose the type of the document (Books) and click on OK button.

Step 9:

Click on File Structure option and select all the required fields that are needed in the output file. Then Click on Ok button.
Step 10:
Click on OK button.

Step 11:
After generating the data in text file,
Go to D:\CLNT\LIBSYS\USR\Print\mstbks.txt and open the file using Excel.
Step 12:

Manipulate/reformat the data using various common utilities such as “Replace”, “Text to columns” functions in excel. Use # sign as the delimiter while converting Text to columns. The final excel data will be as follows.

Data Migration by Generating Reports:

Sometimes, the export facility is disabled by the vendor. So by generating report it is possible to get data.

The process of generating report is as follows:

- Log in as an admin user.
- Browse Cataloguing > Reports > Titles by Accession No > My List. The report supports 132 characters in each line.
- So by choosing accession number (as it is unique) with other fields such as Title, Place, edition, Publisher, Author and Year with keeping Titles by Accession Number option as checked, one report is generated at one time.
- Next time again choosing accession number with other fields such as Class No, Pages, ISBN and subtitles another report is generated.
- By combining the two reports, keeping accession number common to all file, a report is generated.
- Though the report gives an output in the form of text file, a script can be written to collect data in tabular form in Microsoft excel.
DATA MIGRATION (EXCEL TO MARC)

Koha will not let you import excel records directly. Here is a very simple solution, which will let you import your excel records in Koha easily. First, we will convert excel file into Marc file and then will import it into Koha.

Step 1: Install MARC Edit

Download MARC edit from

Download .NET Framework from

Launch Marc Edit
Step 2:

Now open it and select Add-ins > Delimited Text Translator.

Step 3:

Click on Next when the following window appears.
Step 4:

Browse for the excel file.

Locate your excel file by choosing the format Excel File (*.xls).

Similarly, fill all the other entries such as Output File, Excel Sheet Name and check UTF-8 Encoded (if required) and Click Next.
Step 5:

Now it will prompt for mapping the fields to recognize the fields by standard marc format.

Here is the list of fields and their Marc format.

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Marc Format</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accession number</td>
<td>952a</td>
</tr>
<tr>
<td>ISBN number</td>
<td>020a</td>
</tr>
<tr>
<td>Title</td>
<td>245a</td>
</tr>
<tr>
<td>Volumes</td>
<td>440v</td>
</tr>
<tr>
<td>SubTitle</td>
<td>440a</td>
</tr>
<tr>
<td>Author</td>
<td>100a</td>
</tr>
<tr>
<td>Edition</td>
<td>250a</td>
</tr>
<tr>
<td>Publishing place</td>
<td>260a</td>
</tr>
<tr>
<td>Publisher</td>
<td>260b</td>
</tr>
<tr>
<td>Publishing year</td>
<td>260c</td>
</tr>
<tr>
<td>Class number</td>
<td>082a</td>
</tr>
<tr>
<td>Book number</td>
<td>682b</td>
</tr>
<tr>
<td>Subject</td>
<td>650a</td>
</tr>
</tbody>
</table>
Suppose for Field 0 that is first column we entered Map to 022$a (Valid ISSN for the continuing resource) and then click on Apply.

Similarly map all other fields and then Click on Finish.
Step 6:

A window will appear indicating that your MARC Text File (*.mrk) has been created.

Click on Close and we have created an .mrk file from .xls file in this step. You can view the file by double clicking on it.

Click on Close

Step 7: Convert .mrk file to .mrc

We will convert .mrk file that we have created in the above step into raw Marc format that can be directly imported into Koha. For this again open MarcEdit and Select MARC Tools.
Step 8:
Next Select MarcMake to convert .mrk file into .mrc format.

Step 9:
Locate your input file and name your output file. Then Click Execute.
And it will show you the Result as follows.

Click on close and now we have raw Marc records with us (.mrc file).

**Step 10: Import .mrc into Koha**

In this step, we will import above created .mrc file into koha.

Click on Tools in your koha staff client.
Step 11:
Next click on stage MARC records for import.

Step 12:
Choose the previously created .mrc file and click on upload.
Step 13:
We can also add comment about file and finally click on **Stage for Import**.

![Stage for Import Screen](image)

When the import is done, we will get a result something like this:

```
Stage MARC Records For Import
MARC Staging results:
• 9885 records in file
• 0 records not staged because of MARC error
• 9885 records staged
• Did not check for matches with existing records in catalog
• 0 item records found and staged
• **Manage staged records**
• Back
```
Step 14:

Click on **Manage staged records**. Here we can even change matching rules.
Step 15:

Click on **Import this batch into catalog** when it is done. After all the records get imported, check Status and it should read "imported".

We can even undo the import operation by clicking **undo import into catalog**.
KOHA MODULES

Koha is an open source Integrated Library System (ILS), used world-wide by public, schools and special libraries. The name comes from a ‘Maori’ term for a gift or donation. It was developed initially in 1999 by Katipo Communications for the ‘Horowhenua Library Trust’ in New Zealand. The first installation went live in January of 2000. The latest stable release of Koha is 3.14.4.

Features:

Koha is web-based ILS, with a SQL database backend with cataloguing data stored in MARC and accessible via Z39.50. The user interface is very configurable and adaptable and has been translated into many languages. Some of the key features of koha are as follows:

- 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
- 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 Requirements:

- Integrated Library Software: Koha (download from http://www.koha.org/)
- Database: MySQL (download from http://www.mysql.com)
- Operating System: Debian or Any flavor of LINUX.

1) STAFF – LIBRARY MANAGEMENT

Koha ‘Library Management Centre’ page contains options under various categories of library activities like cataloguing, circulation, Patron, Serials, Reports, Acquisitions, Koha Administration.
1.1) Login Page

Figure 1: Login page
Figure 2: Home page of staff management system
1.2) To Set the Library
Click on **Set Library** under Home > Library name
Here you can choose your library to be set and click on submit.
2) ACQUISITION

Acquisition is mainly used for budget, fund, vendor management and order management.

2.1) Adding Currencies and Exchange Rates

If you place orders from more than one country you will want to input currency exchange rates so that your acquisitions module will properly calculate totals.
Step 2:

Click on **New Currency** and fill the currency information and add Currency symbol.
Step 3:

Click on **Submit**.

This data is not updated automatically, so be sure to keep it up to date so that your accounting is kept correct. The active currency is the main currency you use in your library. Your active currency will have a check mark in the Active column. If you don’t have an active currency you will see an error message telling you to choose an active currency.

2.2) Creating Budget

**Step 1:**

Create budget by clicking on **budget option**

**Step 2:**

Click on **NewBudget**
Step 3:

Fill the details of the budget, total amount and save the changes.
Step 4:

Once the budget is created click on Add fund under Actions.
Step 5:

Fill the fund details amount and click on Submit.
Step 6:

Now the fund **books** is added under “NAARM budget 2014”
To create a vendor, click on New vendor under Home > Acquisition.

Step 1:

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All available funds for National Academy Of Agriculture and Research Management library

<table>
<thead>
<tr>
<th>Fund name</th>
<th>Owner</th>
<th>Library</th>
<th>Amount</th>
<th>Ordered</th>
<th>Spent</th>
<th>Avail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Books</td>
<td></td>
<td>National Academy Of Agriculture and Research Management</td>
<td>50,000.00</td>
<td>0.00</td>
<td>0.00</td>
<td>50,000.00</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>50,000.00</td>
<td>0.00</td>
<td>0.00</td>
<td>50,000.00</td>
</tr>
</tbody>
</table>

Show active and inactive.

Manage orders

Vendor search

Submit

Search vendors:
Step 2:

Fill the vendor details and ordering information and click on save button.

Successfully created a vendor
2.4) Order Management (New order and Receive shipment)

Step 1:
Search for vendor and add a new basket to the vendor.
Add a basket to Global books

Basket name: [input field]
Billing place: [dropdown selection]
Delivery place: [dropdown selection]
Vendor: [dropdown selection]
Internal note: [input field]
Vendor note: [input field]

Save | Cancel
Step 3:

Add an order from a new (empty) record. We can also add an order from the existing record, or from a subscription or from a purchase suggestion or from an external source or from a staged file.
Step 4:

Fill the details of the catalog accounting details and click on Save.
Basket naamlib1 (1) for Global books

Delivery place: National Academy Of Agriculture and Research Management
Billing place: National Academy Of Agriculture and Research Management
Managed by: Add user Some changes
Branch: No branch
National Academy Of Agriculture and Research Management
Opened on: 03/15/2014

Orders

<table>
<thead>
<tr>
<th>Order</th>
<th>RRP tax exc.</th>
<th>ecost tax exc.</th>
<th>Qty.</th>
<th>Total tax exc. (USD)</th>
<th>GST %</th>
<th>GST</th>
<th>Fund</th>
<th>Modify</th>
<th>Delete</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.00</td>
<td>0.00</td>
<td>1</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>Books</td>
<td>Transfer</td>
<td></td>
</tr>
</tbody>
</table>

Information technology by
[Add note]

Total (GST 0.00)
Total (USD)

0.80

Showing 1 to 1 of 1

Add order to basket
2.5) Receiving Shipment of an order

Step 1:

Search for vendor and click on Receive shipment.
Step 2:
Fill the details of the order and click on Next.

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Step 3:
Click on **Finish receiving**.

3) **PATRONS**

Select the patron’s icon from the home page. In order to create patrons create categories.

3.1) **Creating Category**

**Step 1:**
Go to Home > Administration > Patron categories.

**Step 2:**
Click on **New category**. Fill the category details and click on **Save**.
3.2) Creating Patrons

Step 1:

Click on **New patron** and select the category.

Step 2:

Fill the required fields related with patron identity. Red color fields are mandatory field. Fill the user name and password in OPAC/Staff login and click on save.
After creating a member allow that member or staff to access various modules by clicking on Set permission. On the patron record click more and choose Set permissions to alter patron permissions.
4) CATALOGUING

4.1) Adding Records using Biblio Framework

In Koha the bibliographic record contains the main information related to the material. This includes things like the title, author, ISBN, etc.

Step 1:

Click on Cataloging icon on staff management.
Step 2:

Click on New Record > Default Framework
Step 3:

Fill all the data in the fields and click on **Save**.
Step 4:

Fill the icon information of the Record (Barcode no.) and click **Add item** icon to save the item.
4.2) Adding Multiple Copies of the Book

Step 1:

Click on **Add multiple copies** icon.

Specify the number of items to add = 11.

Click on **Add** button.
### Items for aaa (Record #25224)

<table>
<thead>
<tr>
<th>Edit</th>
<th>Delete</th>
<th>Withdrawn status</th>
<th>Lost status</th>
<th>Source of classification or shelving scheme</th>
<th>Damaged status</th>
<th>Not for loan</th>
<th>Permanent location</th>
<th>Current location</th>
<th>Date acquired</th>
<th>Barcode</th>
<th>Date last seen</th>
<th>Price effective from</th>
<th>Koha item type</th>
</tr>
</thead>
</table>

**Add Item**

```
start
```

This will create multiple copies of book and generates a barcode number.
4.3) Adding Records using Z39.50

Step 1:
Click on **New** from Z39.50 > Default framework

---

Step 2:
Enter a keyword in title
**Step 3:**

Check library of congress and hit on **search**.
<table>
<thead>
<tr>
<th>Server</th>
<th>Title</th>
<th>Author</th>
<th>Date</th>
<th>Edition</th>
<th>ISBN</th>
<th>LCCN</th>
<th>MARC</th>
<th>Card</th>
<th>Import</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIBRARY OF CONGRESS</td>
<td>$1,000,000 music match-up</td>
<td></td>
<td>1982</td>
<td></td>
<td>93708355</td>
<td></td>
<td>MARC</td>
<td>Card</td>
<td>Import</td>
</tr>
<tr>
<td>LIBRARY OF CONGRESS</td>
<td>1,112 down-to-earth garden secrets</td>
<td></td>
<td>1998</td>
<td></td>
<td>0898212332</td>
<td></td>
<td>MARC</td>
<td>Card</td>
<td>Import</td>
</tr>
<tr>
<td>LIBRARY OF CONGRESS</td>
<td>10 excellent reasons not to hate taxes</td>
<td></td>
<td>2007</td>
<td></td>
<td>9781595581617 (pbk)</td>
<td>9781595581618 (pbk)</td>
<td>MARC</td>
<td>Card</td>
<td>Import</td>
</tr>
<tr>
<td>LIBRARY OF CONGRESS</td>
<td>100 new scientific discoveries</td>
<td></td>
<td>2011</td>
<td></td>
<td>1603201726</td>
<td></td>
<td>MARC</td>
<td>Card</td>
<td>Import</td>
</tr>
<tr>
<td>LIBRARY OF CONGRESS</td>
<td>100 years of pragmatism</td>
<td></td>
<td>2010</td>
<td></td>
<td>9780263553870 (cloth allpaper)</td>
<td>0253353874 (cloth allpaper)</td>
<td>9780253221421 (pbk allpaper)</td>
<td>0253221420 (pbk allpaper)</td>
<td>MARC</td>
</tr>
</tbody>
</table>

From the result select the relevant book and click on Import.
Step 5:

Once the information is filled in the fields check the details and save.
Step 6:

Fill the item information and click on **Add Item**
4.4) Edit Books data

Step 1:

Search for the record that needs to be changed and submit.
Step 2:

Click on Edit biblio
Step 3: Change or correct the details then Save biblio

Item edited successfully
5) CIRCULATION

5.1) Check Out (Issue a book)

Step 1:

Enter the patron number or name and click on Submit.
Enter the barcode number of the book and click on check out.
Item successfully checked out
5.2) Check-In (Return of a book)

Step 1:

Select **Check in** option and enter the barcode number.

Click on **Submit**.
Successfully returned the book
Click transfer in circulation page

Step 1: Transfer the Book

A Step by Step Koha Manual

Circulation
- Check-out
- Check-in
- Renew
- Transfer
- Set Library
- Fast cataloging

Circulation Reports
- Holds status
- Holds to pull
- Holds awaiting pickup
- Hold returns
- Transfers to receive
- Overdue - Warning: This report is very resource intensive on systems with large numbers of overdue items
- Overdue with fines - Limited to your library. See report help for other details

Offline circulation
- Upload offline circulation file (.ksc)
- Parking offline circulation actions
- Get desktop application
- Get Firefox add-on
Step 2:

Select the destination library and enter the barcode number then click on Submit.

Successfully transferred the book
6) SERIALS
6.1) New Subscription

Step 1:

Select serials module on the home page
Step 4:

Type the key word to search for vendor
Choose the vendor

Step 5:

Add a new subscription

Vendor: [Enter vendor name]

Biblio: [Required]

Library: [Select library]

Number of: [Enter number]

Grace period: [Enter grace period]

OPAC note: [Enter note]

Nonpublic note: [Enter note]

Patron notification: [Select notification]

Select a vendor and vendor will be notified when new issues are received.

Vendor search results

You searched on vendor g, 7 results found

Vendor: Agri. Economics Research Association

Select: [Choose]

Vendor: Centre Knowledge Management of Nano science

Select: [Choose]

Vendor: College of Defence Management

Select: [Choose]

Vendor: Globe Subscription Agency

Select: [Choose]

Vendor: Green Farming

Select: [Choose]

Vendor: Indian Society of Agri. Marketing

Select: [Choose]

Subscription start date: [Enter date]

Numbering format: [Enter format]

Test prediction pattern: [Enter pattern]

Reset pattern: [Enter reset]

Save subscription: [Enter save]

ShowHide advanced pattern:
Step 6:
Click on Search for Biblio
Step 10:

Click on Save Subscription.
6.2) Receiving Serials

Step 1:

Search for the record
## Serials subscriptions (2 found)

<table>
<thead>
<tr>
<th>ISSN</th>
<th>Title</th>
<th>Notes</th>
<th>Library</th>
<th>Call number</th>
<th>Expiration date</th>
<th>Reading list</th>
<th>Serial receive</th>
</tr>
</thead>
<tbody>
<tr>
<td>12345</td>
<td>Outlook on Agriculture</td>
<td>Lease Issues</td>
<td>NAARM Library</td>
<td></td>
<td>01/01/2015</td>
<td>New</td>
<td></td>
</tr>
<tr>
<td>67890</td>
<td>Computers and Electronics in agriculture</td>
<td>Lease Issues</td>
<td>NAARM Library</td>
<td></td>
<td>31/12/2013</td>
<td>New</td>
<td></td>
</tr>
</tbody>
</table>

Search ISSN: Search title | Search notes | Search library | Search callnumber | Search expiration date |
Step 3:

Select the **Serial status** under **Status** option. Choose **Arrived** from the status pull down to mark a serial as received and click on **Save**.
If you are receiving multiple issues at once, there you can click the **Multi receiving** button below the list of issues.

Clicking this button will generate the multiple issues at once. You can then check the **edit box** to the right of each issue and edit the status on multiple issues at once.
6.3) Renew Subscription

Step 1:
Check the Summary of the subscription and click on **renew**.
Step 2:

Click on Submit.

The subscription will be renewed from the current date.
7) TOOLS
7.1) Event Management

Libraries can define library closings and holidays to be used when calculating due dates. You can make use of the calendar.

Step 1:

Click on tools from **Staff Management center**
Patrons and circulation
Comments
Moderate patron comments
Import patrons
Import patron data
Notices & slips
Define notices (print and email notification messages for overdues, etc.)
Overdue notice/stats triggers
Set notices/triggers for overdue items
Patron card creator
Create printable patron cards
Batch patron deletion/expiration
Batch delete patrons and reset patron circulation history
Batch patron modification
Worry when in batch
Tags
Moderate patron tags
Upload patron images
Upload patron images in batch or one at a time
Catalog
Batch item deletion
Enter a batch of items
Batch item modification
Modify items in a batch
Export data
Export bibliographies, holdings, and authority records
Inventory/stocktaking
Perform inventory (stocktaking) of your catalog
Label creator
Create printable labels and barcodes from catalog data
Quick online label creator
Enter a barcode to generate a printable online label. For use with associated label printers
Stage MARC records for import
Stage MARC records into the system
Staged MARC record management
Managed staged MARC records, including completing and reverting imports
Upload local cover image
Upload cover images for display in OPAC
Additional tools
Calendar
Current days when the library is closed
CSV profiles
Manage CSV export profiles
Log viewer
Browse the system logs
News
Write news for the OPAC and staff interfaces
Task scheduler
Schedule tasks to run
Edit quotes for GOTO feature
Quote editor for Quote-of-the-day feature in OPAC
Step 3: Click on Sunday and select weekly holiday. Then click on save.
This will mark every Sunday as holiday.
Likewise, you can choose any kind of event whether it is a onetime event or it is repeatable.

If there is a one day holiday, choose **Holiday only on this day**.

- If there is a weekly closing (like a weekend day) then you can choose **Holiday repeated every same day of the week**.
- If there is an annual holiday closing choose **Holiday repeated yearly on the same date**.
- If the library is going to be closed for the week or a range of time choose **Holiday on a range** and enter a **To Date** at the top.
- If the library is going to be closed for a range of time each year (such as summer holidays for schools) choose **Holiday repeated yearly on a range** and enter a **To Date** at the top.
- Finally decide whether the event should be applied to all libraries or just the one you have originally selected.

You can also enter all the holidays and then copy them all to another branch all at once by using copy menu below the calendar.
### NAARM Library Calendar

**Calendar information**

<p>| | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
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<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Copy holidays to:**

- NAARM Library

**Hints**
- Search in the calendar for the day you want to set as holiday.
- Click the date to add or edit a holiday.
- Enter a title and description for the holiday.
- Specify how the holiday should repeat.
- Click Save to finish.

**Weekly - Repeatable Holidays**

<table>
<thead>
<tr>
<th>Day of week</th>
<th>Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sunday</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Catalog

- Batch patron deletion
- Batch patron modification
- Export data
- Inventory stocktaking
- Label creator
- Quick print label creator
- Staged MARC import
- Staged MARC management
- Upload local cover image

### Additional tools

- Calendar
- CSV profiles
- Log viewer
Welcome to Koha's label creator module

The Label Creator allow you to use layouts and templates which you design to print a nearly unlimited variety of labels including barcodes. Here are some of the features of the Label Creator module:

- Customise label layouts
- Design custom label templates for printed labels
- Build and manage batches of labels
- Export single or multiple batches
- Export single or multiple labels from within a batch
- Export label data in one of three formats:
  - PDF - Readable by any standard PDF reader, making labels printable directly on a printer
  - CSV - Export label data after your chosen layout is applied allowing labels to be imported into a variety of applications
  - XML - Included as an alternate export format

At the top of each screen within the Label Creator, you will see a toolbar allowing quick access to relevant functions. The menu on the left of each screen also allows easy access to the different sections of the Label Creator. The breadcrumb trail near the top of each screen will give specific indication as to where you are within the Label Creator modules and allow quick navigation to previously traversed sections. And finally, you can find more detailed information on each section of the Label Creator by clicking the online help link at the upper left-hand corner of every page.

The developers of the Label Creator module hope you will find this an extremely useful tool in the course of your cataloging work. You are encouraged to submit any enhancement requests as well as any bugs to Koha Project Bugzilla.
### Currently Available Layouts

<table>
<thead>
<tr>
<th>Layout ID</th>
<th>Layout</th>
<th>Barcode Type</th>
<th>Print Type</th>
<th>Fields to Print</th>
<th>Select</th>
</tr>
</thead>
<tbody>
<tr>
<td>23</td>
<td>DEFAULT</td>
<td>CODE39</td>
<td>BAR</td>
<td>title, author, isbn, itemtype, barcode, itemcallnumber</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>NAARM</td>
<td>CODE39</td>
<td>BAR</td>
<td>Home Library, barcode, barcode number</td>
<td></td>
</tr>
</tbody>
</table>

Showing 1 to 2 of 2 rows.

[Start] [Delete]
Step 4:
Click on **New batch**
Step 5:

Add Barcode one by one and click on Add items
Step 6:
Select all items and click on Export Batch

A Step by Step Koha Manual
Step 7:

Click on Export
Step 8:
Click on **Download as PDF**
Step 9:

Click on **OK** and open the file
8) REPORTS

Reports in Koha are a way to gather data. Reports are used to generate statistics, member lists, shelving lists, or any list of data in your database.

Koha's data is stored in a MySQL database which means that librarians can generate nearly any report they would like by either using the **Guided Reports Wizard** or writing their own SQL query.
8.1) Building a New Report:

Step 1:
Click on **Reports** under Staff management center
Guided reports

Use the guided reports engine to create non-standard reports. This feature aims to provide some middle ground between the built-in canned reports and writing custom SQL reports.

Build and run reports

Build new | Use saved | Create report from SQL

Reports Dictionary

Use the reports dictionary to define custom criteria to use in your reports

View dictionary
Step 4:

Choose the module you want to report on (e.g. cataloging).

**Report is public** option should be left to the default of **No**. Then click on **Next**.
Step 5:
Choose a report type as **Tabular**.

Step 6:
Choose the fields you want in your report. You can select multiple fields and add them all at once by using CTRL+Click on each item you want to add before clicking the Add button. Then click on **Next**.

Step 7:
Choose any limits you might want to apply to your report (such as item types or branches). If you don't want to apply any limits, simply click on **Next** instead of making an option.

Step 8:
Perform math functions. If you don't want to do any calculations, simply click on **Next** instead of making an option.
Step 9:

Choose data order. If you want the data to print out in the order it’s found in the database, simply click on **Finish**.

When you are finished you will be presented with the SQL script generated by the report wizard. From here you can choose to save the report by clicking on **Save** or copy the SQL and make edits according to the requirement.
Step 10:
Click on **Save**.

Step 11:
Enter the report name and click on **Save Report**.

Once the report is saved it will appear on the **Use Saved** page with all other saved reports.
Guided reports

Use the guided reports engine to create non-standard reports. This feature aims to provide some middle ground between the built-in canned reports and writing custom SQL reports.

Build and run reports

- Build new
- Use saved
- Create report from SQL

Reports Dictionary

Use the reports dictionary to define custom criteria to use in your reports.

- View dictionary
### Saved reports

<table>
<thead>
<tr>
<th>ID</th>
<th>Report name</th>
<th>Type</th>
<th>Group</th>
<th>Subgroup</th>
<th>Notes</th>
<th>Author</th>
<th>Creation date</th>
<th>Public</th>
<th>Saved results</th>
<th>Saved SQL</th>
<th>Run Schedule</th>
<th>Delete</th>
</tr>
</thead>
<tbody>
<tr>
<td>27</td>
<td>a</td>
<td>1</td>
<td>NAARM, Library (D)</td>
<td></td>
<td></td>
<td></td>
<td>07/23/2014</td>
<td>No</td>
<td>Show Edit Duplicate</td>
<td>Run Schedule</td>
<td>Delete</td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>a</td>
<td>1</td>
<td>NAARM, Library (D)</td>
<td></td>
<td></td>
<td></td>
<td>10/23/2014</td>
<td>No</td>
<td>Show Edit Duplicate</td>
<td>Run Schedule</td>
<td>Delete</td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>abc</td>
<td>1</td>
<td>NAARM, Library (D)</td>
<td></td>
<td></td>
<td></td>
<td>10/23/2014</td>
<td>No</td>
<td>Show Edit Duplicate</td>
<td>Run Schedule</td>
<td>Delete</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>Accession Register</td>
<td>1</td>
<td>Accession Register Sorted by Barcode Number Report</td>
<td></td>
<td></td>
<td></td>
<td>01/01/2013</td>
<td>No</td>
<td>Show Edit Duplicate</td>
<td>Run Schedule</td>
<td>Delete</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Accounting for date range</td>
<td>1</td>
<td>List of all accounting details in date range</td>
<td></td>
<td></td>
<td></td>
<td>01/01/2013</td>
<td>No</td>
<td>Show Edit Duplicate</td>
<td>Run Schedule</td>
<td>Delete</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>All Checked Out Books</td>
<td>1</td>
<td>A report to show you all items that are currently checked out and who they're checked out to</td>
<td></td>
<td></td>
<td></td>
<td>01/01/2013</td>
<td>No</td>
<td>Show Edit Duplicate</td>
<td>Run Schedule</td>
<td>Delete</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Barcode Search Report</td>
<td>1</td>
<td>Barcode search report. To verify if a record available against provided barcode.</td>
<td></td>
<td></td>
<td></td>
<td>01/01/2013</td>
<td>No</td>
<td>Show Edit Duplicate</td>
<td>Run Schedule</td>
<td>Delete</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>bw</td>
<td>1</td>
<td>NAARM, Library (D)</td>
<td></td>
<td></td>
<td></td>
<td>11/03/2014</td>
<td>No</td>
<td>Show Edit Duplicate</td>
<td>Run Schedule</td>
<td>Delete</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>Check-in Books in a Date Range</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>01/01/2013</td>
<td>No</td>
<td>Show Edit Duplicate</td>
<td>Run Schedule</td>
<td>Delete</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>Checkouts &amp; Renewals in Date Range</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>01/01/2013</td>
<td>No</td>
<td>Show Edit Duplicate</td>
<td>Run Schedule</td>
<td>Delete</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Complete Shelf List</td>
<td>1</td>
<td>Complete Shelf List and List all</td>
<td></td>
<td></td>
<td></td>
<td>01/01/2013</td>
<td>No</td>
<td>Show Edit Duplicate</td>
<td>Run Schedule</td>
<td>Delete</td>
<td></td>
</tr>
</tbody>
</table>
9) ADMINISTRATION

- Preferences
- Branches
- Funds & Budgets
- Patron Categories
- Circulation Rules

10) OPAC

- Searching
- Tagging
- Comment
- Useful URL's
- Zero in Search
- Popular Items
- Recommendation
10.1) Searching

To search the OPAC you can either choose to enter your search words in the box at the top of the OPAC or click on the Advanced Search link to perform a more detailed search.
10.2) My Account

From the OPAC patrons can log in and access their account if you have set the opacuserlogin preference to 'Allow'. Once logged in patrons are brought to their account summary.

From the 'my summary' tab, patrons will see all of the items they have checked out with the overdue items highlighted in red.
10.2.1) Personal Details

Step 1:

Click on Personal details.

Patrons will see a form filled in with their contacting information by clicking on the 'my personal details' tab.
Patrons can edit their details in this form and click "Submit Changes" to have their edits sent to the library for review before their record is updated.
10.2.2) Purchase Suggestions

- Patrons can make suggestions to the acquisitions department regarding titles for the library.
- When patrons are logged into the OPAC they have the option to make purchase suggestions for items they cannot find in the library catalog.
- Koha automatically informs the OPAC user of the action taken on each suggestion.

**Step 1:**
Click on **my purchase suggestions** tab

This will show all suggestions that the patron made to the library and their statuses.
Step 2:

To make a new Suggestion click on New purchase suggestion

Step 3:

Fill in as much information as you can and click **Submit Your Suggestion**

- Patrons can view the status of their suggestions or place additional suggestions from their profile
TERMINOLOGIES

OPAC: Online Public Access Catalog
An OPAC is an online database of materials held by a library or group of libraries. Users search a library catalog principally to locate books and other material available at a library.

APT: Advanced Packaging Tool
An APT is a free user interface that works with core libraries to handle the installation and removal of software on the Debian GNU/Linux distribution and its variants.

SQL: Structured Query Language
SQL is a special-purpose programming language designed for managing data held in a relational database management system (RDBMS).

DPKG: Debian Package
DPKG is the software at the base of the Debian package management system. DPKG is used to install, remove, and provide information about .deb packages.

MARC: Machine-Readable Cataloging
The MARC formats are standards for the representation and communication of bibliographic
and related information in machine-readable form.

DHCP: Dynamic Host Configuration Protocol
The DHCP is a standardized networking protocol used on Internet Protocol (IP) networks for dynamically distributing network configuration parameters, such as IP addresses for interfaces and services.

NTP: Network Time Protocol
NTP is a networking protocol used to synchronize the clocks of computers to sometime reference.

RAID: Redundant Array of Inexpensive Disks
RAID is a data storage technology that combines multiple disk drive components into a logical unit for the purposes of data redundancy and
performance improvement.

**OCLC: Online Computer Library Center**

OCLC is a nonprofit, membership computer library service and research organization dedicated to the public purposes of furthering access to the world's information and reducing information costs.

**WORLDCAT**

WorldCat is a union catalogue that itemizes the collections of 72,000 libraries in 170 countries and territories which participate in the OCLC global cooperative. It is built and maintained collectively by the participating libraries. It contains more than 300 million records, representing over 2 billion physical and digital assets in more than 470 languages, as of January 2014, it is the world's largest bibliographic database.

**AGRICAT**

AgriCat is a union catalogue of the holdings of 12 major libraries of the Indian Council of Agricultural Research (ICAR) Institutes and State Agricultural Universities (SAU) combined together.

**KRISHIKOSH**

KrishiKosh, an Institutional Repository under National Agricultural Research System (NARS) is a repository of knowledge in agriculture and allied sciences, having collection of old and valuable books, records and various documents spread all over the country in different libraries of Indian Council of Agricultural Research (ICAR) Institutes and State Agricultural Universities (SAUs).

**AGROTAG**

The Agrotag is a vocabulary developed by IIT Kanpur and ICRISAT with collaboration of FAO, Rome. Agrotags was envisaged as a collection of terms that would be used to tag digital information objects (DIOs) in the agriculture area. Agrotags is a subset of Agrovoc and is much smaller about 2100 as against 40,000.

**PDF/A**

PDF/A is an ISO-standardized version of the Portable Document Format (PDF) specialized for the digital preservation of electronic documents. PDF/A differs from PDF by omitting features ill-suited to long-term archiving, such as font linking.
REFERENCES

- http://www.debian.org/releases/wheezy/amd64/ Debian GNU/Linux Installation Guide
- Koha 3.14 manual (http://koha-community.org/documentation/)