Koha
Koha

Introduction
Koha is an open source integrated library management system (ILS).

- http://koha-community.org
- http://koha-community.org/demo
- http://www.librarytechnology.org/map.pl?ILS=Koha

Support
Below are links to web sites for support and help.

It is expected that some contribution is made in return to the Koha community for the use of their freely given software.

This can take the form of software contributions or simply providing added support yourself by announcing yourself on the mailing list.

- Official documentation: http://koha-community.org/documentation
- The Koha community wiki: http://wiki.koha-community.org/wiki/Main_Page
- Community mailing lists: http://koha-community.org/support/koha-mailing-lists
- Community IRC: http://koha-community.org/get-involved/irc
- Paid support: http://koha-community.org/support/paid-support
- Community support: http://koha-community.org/support

Social Networks

- LinkedIn Group at: http://www.linkedin.com/groups?home=&gid=671467&trk=anet_ug_hm
- Google + community at: https://plus.google.com/u/0/communities/108301839510288716136
- Twitter account at: https://twitter.com/kohails
- Facebook at: https://www.facebook.com/kohails

For library systems management

- Easy to install
- Easy to setup
- Easy to style
- Easy to backup
- Easy to upgrade

Basically the Koha developers are trying to make it the "Wordpress" of open library management systems.
For library staff and clients

In addition to the items listed below and above, the major advantage of Koha is the large community that supports Koha [1].

Koha is fully web based and has a mobile theme, therefore Koha is very BYOD [2] friendly for Linux, Android, MAC and Windows internet devices.

**Koha is device operating system and internet browser agnostic, therefore it is available to all devices and users.**

- An interoperable open standards based ILS.
- Stable and reliable web based service
- A web service that is fast and secure

**Preparation**

1. **Decide on a hostname for the server, that is short and easy to remember and that you are sure will not change in the long term. See the following for more details:**


2. This wiki guide assumes that you have access to expert linux systems administration and web 2.0 developer resources to perform the installation, customisation and provide long term support.

3. **Discuss and prepare for long term support of an open library management system, by drawing up service level agreements or memorandum of understandings with significant partners such as the main campus IT department, campus press and campus open scholarly communications office [3].**

4. ** Allocate server resources, be they bare metal or a virtual machine, for a production version of Koha and for a backup server in another geographical location.**

5. **Ensure your server has inbound and outbound access to the internet via your campus proxy/firewall using TCP on port 80 and 443.**

6. **Ensure your server has inbound and outbound access on the campus network using TCP on port 8080.**

**Koha Installation**

Click on the heading above.

**Koha Post-Installation**

Click on the heading above.

**Koha Customisation**

Click on the heading above.

**Koha Interoperability**

Click on the heading above.

**Koha Training**

Click on the heading above.
Web site connection details

OPAC

• The OPAC, or client page, can be accessed at:

http://name-of-koha-server

Admin

• The library admin interface can be accessed at:

http://name-of-koha-server:8080

Demo

• The Stellenbosch University library is evaluating the following site to host small book collections on campus which do not qualify for full branch status. The Open Library and Project Gutenberg catalogs for 2013 have been added.

http://lib.sun.ac.za

References

Software

• http://wiki.koha-community.org/wiki/Koha_on_ubuntu_-_packages
• http://wiki.koha-community.org/wiki/Commands_provided_by_the_Debian_packages
• http://wiki.koha-community.org/wiki/
  Moving_an_installation_from_a_regular_install_to_the_Debian_packages
• http://github.com/Koha-Community/Koha

Documentation

• http://wiki.koha-community.org/wiki/SQL_Reports_Library
• http://wiki.koha-community.org/wiki/Koha_Users_Worldwide
• http://wiki.koha-community.org/wiki/Installation_Documentation

References

Koha/Installation

Introduction
It is strongly recommended that you use the "packages" installation method which is designed to simplify and streamline the installation, configuration and upgrades of Koha.

Step 1 - Install Ubuntu 12.04 LTS server software on a bare metal or virtual machine.
• During installation create a "koha" admin user.

Step 2 - Install the LAMP stack
• During installation install the "LAMP" stack.

Step 3 - Enable the Koha software repository
• After installation add the following to /etc/apt/sources.list.d/koha.list.
  echo deb http://debian.koha-community.org/koha squeeze main | sudo tee /etc/apt/sources.list.d/koha.list
  wget -O- http://debian.koha-community.org/koha/gpg.asc | sudo apt-key add -
• Do a software upgrade.
  sudo apt-get update
  sudo apt-get dist-upgrade

Step 4 - Install Koha packages
• Install the koha packages
  sudo apt-get install koha koha-common bibutils etckeeper

Step 5 - Create a Koha library instance
• Create a koha library database
  sudo koha-create --create-db library
• Enable email for the "library" instance
  sudo koha-email-enable library
**Step 6 - Prepare the Apache2 web server**

- Setup web server listening ports.

  ```
sudo nano /etc/apache2/ports.conf
  ```

  Check the following for an example of listening ports

  ```
  #NameVirtualHost *:80
  Listen 80
  Listen 8080
  ```

- Setup apache2 modules

  ```
sudo a2enmod rewrite
  sudo a2enmod deflate
  ```

- Disable the default website

  ```
sudo a2dissite 000-default
  ```

- Disable the default koha website

  ```
sudo a2dissite koha
  ```

- Enable the custom "library" web site

  ```
sudo a2ensite library
  ```

- Restart the apache2 web server

  ```
sudo service apache2 restart
  ```

**Step 7 - Do the Koha web installation**

- **Reboot the server** and then connect to the following URL to configure the KOHA webapp.

  ```
  http://name-of-koha-server:8080
  ```

  The user name to log in with will be **koha_library** and the password will be near the end of `/etc/koha/sites/library/koha-conf.xml`

  To view the password, use this command:

  ```
sudo xmlstarlet sel -t -v 'yazgfs/config/pass' /etc/koha/sites/library/koha-conf.xml
  ```

  Click on one of the screenshots below to view webapp config.

  ![Web installer](image-url)
Web installer › Step 1

All dependencies installed.

Please click ‘Next’ to continue Next »»

Web installer › Step 2

**Database settings:**

- database type : mysql
- database name : koha_library
- database host : localhost
- database port : 3306 (probably OK if blank)
- database user : koha_library

Please click ‘Next’ to continue if this information is correct Next »»

Web installer › Step 2

**Database settings:**

- database type : mysql
- database name : koha_library
- database host : localhost
- database port : 3306 (probably OK if blank)
- database user : koha_library

Connection established.

Database koha_library exists.

User koha_library has all required privileges on database koha_library.

Click ‘Next’ to continue Next »»

Web installer › Step 3

Now we're ready to create the database tables and fill them with some default data.

Click ‘Next’ to continue Next »»
Web installer > Step 3

Success

- Database tables created

Click 'Next' to continue

Web installer > Step 3

We are ready to do some basic configuration. Please install basic configuration settings to continue the installation.

Web installer > Step 3

Select your MARC flavor

- Marc21
- Unimarc

Click 'Next' to continue

Web installer > Step 3

Selecting Default Settings

MARC frameworks: Marc21

Mandatory

- Default MARC21 Standard Authority types:
  - Personal Name
  - Corporate Name
  - Meeting Name
  - Uniform Title
  - Chronological Term
  - Topical Term
  - Geographic Name
  - Genre/Form Term

(authorities_normal_marc21)

- Default MARC 21 bibliographic framework.
  (marc21_framework_DEFAULT)
Koha/Post-Installation

Step 1 - Enable system backup and monitor

- With the packages installation, the *koha-run-backups* command is available. See below for help.

```
/usr/sbin/koha-run-backups - performs backups of the koha installations on the system
```

This allows automation of backing up the koha data and configuration to the filesystem. It will keep the past so many backups, discarding older ones.

Options:

- **--output**: the directory that the resulting files will be placed into.  
  (default: /var/spool/koha)
- **--days**: the number of days to keep backups around for  
  (default: 2)

Note: backups produced using this tool can be restored using `koha-restore`

- Setup the root crontab by adding the following: *(Check database credentials in "/etc/koha/koha-conf.xml” first).*

```
@daily /usr/sbin/koha-run-backups
```
Help


Also see: https://github.com/Koha-Community/Koha/blob/master/misc/cronjobs/backup.sh

Step 2 - Setup automated tasks using the cron daemon


1. Add the above to "root" user crontab. Remove all instances of "__KOHA_USER__" since we are already the "root" user.
2. Check /etc/koha/koha-conf.xml for correct database credentials.
3. Remove the rebuild_zebra.pl task if Koha was installed using the packages method. See /etc/cron.d/koha for packages method of zebra index rebuild.

Step 3 - Setup email delivery

- Install mail delivery agent

  
  sudo apt-get install postfix

When asked for type of configuration, select Internet with smarthost. The smarthost is your campus email server, for example at Stellenbosch University that server is: mail.sun.ac.za

- Deliver koha user email to designated recipients

  sudo nano /etc/aliases

See example below. Replace the example email addresses with your email addresses.

# Added by installer for initial user
root: me@my.edu
koha: me@my.edu, you@my.edu

After saving the file, run the following command.

  sudo newaliases

Enable command line email utils

  sudo apt-get install mailx

Send a test email to yourself, by typing and pressing enter.

  mail -s "Test from KOHA server" root, me@my.edu

Type in some content for the email, then press CTL+d to deliver the email.

  You can check the log at /var/log/mail.log for more info of delivery.
Help
• https://help.ubuntu.com/community/Postfix

Tips
• https://github.com/colinsc/koha/blob/master/misc/maintenance/borrowers-force-messaging-defaults

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Koha/Customisation

Step 1 - Setup custom website style
• Select the "ccsr" theme using the opathemes parameter in the admin interface.
• Setup the opacsallimage in the admin interface.
• See the highlighted red boxes in the screenshot below for customisable areas of the OPAC web interface.

• The following folder contains the CCS files to style the OPAC client depending on which theme you selected.
/usr/share/koha/opac/htdocs/opac-tmpl

• The following folder contains the CCS files to style the admin interface.
/usr/share/koha/intranet/htdocs/intranet-tmpl
Step 2 - Enable LDAP user ID and authentication

To do.

Help

- http://kohablog.wordpress.com/category/koha/ldap
- http://www.slideshare.net/ohiocore/koha-integration-ldap
Koha/Interoperability

Koha can import/export data and read data from other catalogs. This wiki page attempts to document the interoperability of Koha with other book cataloging systems.

Records

- http://en.wikipedia.org/wiki/Authority_control

MARC

- http://lib2.dss.go.th/elib/marc21/examples.html
- http://www.loc.gov/marc/marctools.html

Migration Documentation

- http://opensource-ils.cci.utk.edu/content/koha-migration-process
- http://opensource-ils.cci.utk.edu/content/publications

Sample MARC Data/Records

- http://bywatersolutions.com/2013/06/20/ebook-marc-for-koha

MARC records for purchase


How to import MARC bibliographic records

The following procedure describes how to import sample records from Springer E-Books, Project Gutenberg and the Open Library. Check the relevant sites for the most recent records.
Step 1
Install MARCEDIT\(^{[1]}\). Then download the MARC files from here: http://web.lib.sun.ac.za/files/marc/or get the latest from the links below.

http://archive.org/details/marc_lendable_books

http://www.gutenberg.org/wiki/Gutenberg:Offline_Catalogs

http://www.springer.com/?referer=springer.com&SGWID=1-148802-3020-0-0

Step 2
Add the 952 tag and fields required by Koha to the exported file using MARCEDIT. See this tutorial\(^{[2]}\). These are:

952$a | Owning Library | Branch code
952$b | Holding Library | Branch code
952$y | Koha item type | Coded value

Step 3
If importing a very large amount of records, it is a good idea to stop the automated zebra index update. See "/etc/cron.d/koha" if you used the packages installation method.

Import the .mrc file using the Koha admin interface. Or use the /usr/share/koha/bin/migration_tools/bulkmarcimport.pl tool. See below for help.

BULKMARCIMPORT(1) User Contributed Perl Documentation BULKMARCIMPORT(1)

NAME
bulkmarcimport.pl - Import bibliographic/authority records into Koha

USAGE
$ export KOHA_CONF=/etc/koha.conf
$ perl misc/migration_tools/bulkmarcimport.pl -d -commit 1000 \ 
  -file /home/jmf/koha.mrc -n 3000

WARNING
Don't use this script before you've entered and checked your MARC parameters tables twice (or more!). Otherwise, the import won't work correctly and you will get invalid data.

DESCRIPTION
-h This version/help screen

-b, -biblios
Type of import: bibliographic records

-a, -authorities
Type of import: authority records
-file=FILE
  The FILE to import

-v  Verbose mode. 1 means "some infos", 2 means "MARC dumping"

-fk Turn off foreign key checks during import.

-n=NUMBER
  The NUMBER of records to import. If missing, all the file is imported

-o, -offset=NUMBER
  File offset before importing, ie NUMBER of records to skip.

-commit=NUMBER
  The NUMBER of records to wait before performing a 'commit' operation

-l  File logs actions done for each record and their status into file

-t, -test
  Test mode: parses the file, saying what he would do, but doing nothing.

-s  Skip automatic conversion of MARC-8 to UTF-8. This option is provided for debugging.

-c=CHARACTERISTIC
  The CHARACTERISTIC MARC flavour. At the moment, only MARC21 and UNIMARC are supported. MARC21 by default.

-d  Delete EVERYTHING related to biblio in koha-DB before import. Tables: biblio, biblioitems, items

-m=FORMAT
  Input file FORMAT: MARCXML or ISO2709 (defaults to ISO2709)

-authtypes
  file yamlfile with authoritiesTypes and distinguishable record field in order to store the correct authtype

-yaml
  yaml file format a yaml file with ids

-filter
  list of fields that will not be imported. Can be any from 000 to 999 or field, subfield and subfield's matching value such as
200avalue

-insert
  if set, only insert when possible

-update
  if set, only updates (any biblio should have a matching record)

-all
  if set, do whatever is required

-k, -keepids=<FIELD>
  Field store ids in FIELD (usefull for authorities, where 001 contains the
  authid for Koha, that can contain a very valuable info for authorities coming
  from LOC or BNF. useless for biblios probably)

-match=<FIELD>
  FIELD matchindex,fieldtomatch matchpoint to use to deduplicate
  fieldtomatch can be either 001 to 999 or field and list of
  subfields as such 100abcde

-i,-isbn
  If set, a search will be done on isbn, and, if the same isbn is
  found, the biblio is not added. It's another method to deduplicate.
  -match & -isbn can be both set.

-cleanisbn
  Clean ISBN fields from entering biblio records, ie removes hyphens.
  By default, ISBN are cleaned. --nocleanisbn will keep ISBN unchanged.

-x=TAG
  Source bib TAG for reporting the source bib number

-y=SUBFIELD
  Source SUBFIELD for reporting the source bib number

-idmap=FILE
  FILE for the koha bib and source id

-keepids
  Store ids in 009 (usefull for authorities, where 001 contains the
  authid for Koha, that can contain a very valuable info for authorities coming
  from LOC or BNF. useless for biblios probably)

-dedupbarcode
If set, whenever a duplicate barcode is detected, it is removed and
the attempt to add the record is retried, thereby giving the record
a blank barcode. This is useful when something has set barcodes to
be a biblio ID, or similar (usually other software.)

-framework
This is the code for the framework that the requested records will
have attached to them when they are created. If not specified, then
the default framework will be used.

perl v5.14.2                      2013-07-29                 BULKMARCIMPORT(1)

Step 4
Run the /usr/sbin/koha-rebuild-zebra -a -b -f -v library command to rebuild all the indexes or if using SOLR for
indexing, then run /usr/share/koha/bin/migration_tools/rebuild_solr.pl.

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References

Koha/Training

Books
• http://www.packtpub.com/koha-3-library-management-system/book

Communities
• http://ethiokoha.wordpress.com

General
• http://koha-community.org/category/koha-training
• http://bywatersolutions.com/solutions/koha-training
• http://bywatersolutions.com/education/koha-training-handouts
• http://libriotech.no/english
• http://opensource-ils.cci.utk.edu/content/koha-annotated-training-links
• http://os-ol.org/training/koha

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