KOHAN: AN INSTALLATION ROADMAP

Zahoor ur Rehman

Al-Khawarizmi Institute of Computer Science
zahoor@kics.edu.pk

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Integrated Library System

- (Cataloging + Serials + Acquisitions + Circulation)
- Emerged in the 1960’s - 1970’s
- Functionality has evolved and expanded, but basic concepts and modules remain intact
Legacy ILS Functionality

Public User Interface:

Functional modules:

Data Stores:

Circulation

Acquisitions

Cataloging

Serials

Vendor Based ePurchasing

Vendor Based Metadata Enhancement
EVALUATING CRITERIA

- Active current development under way
- At least the cataloging, circulation, patron access catalog modules, acquisitions and serials control should be available.
- MARC support
- Current source code and documentation available
- Currently in use in libraries
- Scalability
KOHA MODULES

- OPAC
- Cataloging
- Circulation
- Serials
- Acquisition
- Patron Management
- Branch management
- Reservations
Koha features

- Open-source Software (no license fee).
- OS independence
- Web based
- Full MARC21 and UNIMARC support
- Multilingual and multi-user support
- Z39.50 server.
- Customizable OPAC and circulation system.
- Online reservation.
- Circulation, acquisitions, library stock management.
- Serial management module.
- Export and import records facility.
HOW DOES KOHA WORKS?
KOHA: INSTALLATION ROADMAP
PRE-REQUISITES FOR KOHA INSTALLATION

- Apache Server
- MySQL
- Zebra Server
- PERL Platform
START APACHE SERVICES AND NETWORK

- Start network services and Apache
- `[root@localhost ~]# /etc/init.d/network start`

Apache configuration (for UTF-8):

- However, to verify, using a text editor, open the `httpd.conf` file located in `/etc/httpd/conf` and look if it contains the directive:

  - `AddDefaultCharset UTF-8`
MYSQL CONFIGURATIONS
MYSQL CONFIGURATION

- start mysql service from terminal
  [root@localhost ~]# /etc/init.d/mysqld start

Check the encoding variables of MySQL

- mysql> show variables like 'char%';

```
+--------------------------+-----------------------+
| Variable_name            | Value     |
|--------------------------+-----------------------+
| character_set_client     | latin1     |
| character_set_connection | latin1     |
| character_set_database   | latin1     |
| character_set_filesystem | binary     |
| character_set_results    | latin1     |
| character_set_server     | latin1     |
| character_set_system     | utf8       |
```
CREATE A BACKUP OF THE MySQL CONFIGURATION FILE (my.cnf)

- Use any editor to add these 3 lines in the section [mysqld] of the my.cnf file:
  
  `default-character-set = utf8`
  
  `character-set-server = utf8`
  
  `skip-character-set-client-handshake`

- Restart MySQL

  `[/root@localhost ~]# /etc/init.d/mysqld restart`
**Finalizing MySQL Configuration**

- **Create the Koha database**
  ```
  mysql> create database koha;
  ```

- **Grant privileges to MySQL user**
  ```
  mysql> grant all on koha.* to 'kohaadmin'@'localhost'
      identified by 'test123';
  ```

- **Flush privileges**
  ```
  mysql> flush privileges;
  ```

- **Restart MySQL**
  ```
  [root@localhost ~]# /etc/init.d/mysqld restart
  ```
ZEBRA SERVER CONFIGURATION
INSTALLATION OF ZEBRA Server

- To install zebra download the current version from
- Install as administrator (root)
- Screen shot

[root@localhost Desktop]# rpm -ivh idzebra-2.0-2.0.32-1.src.rpm 1:idzebra-2.0
Preparing...

######################################################################## [100%]
PERL PLATFORM
CPAN INITIALIZATION FOR INSTALLING PERL PROGRAMS

- [root@localhost ~]# cpan
   /usr/lib/perl5/5.8.8/CPAN/Config.pm initialized.

Reply Following Questions Accordingly

1. Are you ready for manual configuration? [yes]
2. Cache size for build directory (in MB)? [10]
3. Perform cache scanning (at start or never)? [at start]
4. Cache metadata (yes/no)? [yes]
5. File to save your history? [/root/.cpan/histfile]
6. Number of lines to save? [100]
7. Select your continent (or several nearby continents) [2]
EDIT PARSERDETAILS.INI FILE

#[XML::SAX::PurePerl]

#http://xml.org/sax/features/namespaces = 1

[XML::LibXML::SAX::Parser]

#[XML::LibXML::SAX]

#http://xml.org/sax/features/namespaces = 1

  o [root@localhost misc]# ./sax_parser_print.pl

    Koha wants something like:

    XML::LibXML::SAX::Parser=HASH(0x81fe220)

You have:  XML::LibXML::SAX::Parser=HASH(0x842d308)  Looks good.
KOHA INSTALLATION
Run Koha's Perl Installer

[root@localhost Koha]# perl Makefile.PL
1. Installation mode (dev, single, standard) [standard]
2. Base installation directory [/usr/share/koha]
3. User account [koha]
4. Group [koha]
5. DBMS to use (Pg, mysql) [mysql]
6. Database server [localhost]
7. Please specify the port used to connect to the DBMS [3306]
8. Please specify the name of the database to be used by Koha [koha]
9. Please specify the user that owns the database to be used by Koha [kohaadmin]
10. Please specify the password of the user that owns the database to be used by Koha [kativoan] test123
11. Install the Zebra configuration files? (no, yes) [yes]
12. MARC format for Zebra indexing (marc21, unimarc) [marc21]
13. Primary language for Zebra indexing (en, fr) [en]
14. Authorities indexing mode (dom, gars1) [grs1]
15. Please specify Zebra database user [kohauuser] kohausadmin
16. Please specify the Zebra database password [zebrasripes] test123
17. Install the SRU configuration files? (no, yes) [yes]
18. SRU Database host? [localhost]
19. SRU port for bibliographic data? [9998]
20. SRU port for authority data? [9999]
21. Install the PazPar2 configuration files? [no]
22. Would you like to run the database-dependent test suite? (no, yes) [no]
KOHA’S PERL INSTALLER

- **Run following commands**
  
  [root@localhost Koha]# make
  [root@localhost Koha]# make test
  [root@localhost Koha]# make install

- **Environment variables**
  
  [root@localhost ~]# export KOHA_CONF=/etc/koha/koha-conf.xml
  [root@localhost ~]# export PERL5LIB=/usr/share/koha/lib

- **Editing the httpd.conf file**

  Insert following line

  include /etc/koha/koha-httpd.conf
EDITING THE KOHA-HTTPD.CONF FILE

- Add **Listen 8080**
- **Intranet**
- `<VirtualHost 127.0.0.1:8080> 192.168.1.178:8080`  
- **OPAC**
- `<VirtualHost 127.0.0.1:80> 192.168.1.178:80`
- **Restart Apache by** `/etc/init.d/httpd restart`
KOHA'S WEB INSTALLER

- Access Koha's web installer.
- Open your web browser and type Your IP ..., {192.168.1.178:8080} and your browser will open koha web Installer
TYPE YOUR USER NAME AND PASSWORD PRESS LOGIN
Click menu select your language and continue. I selected English (en)
Continue..

continue..... click next to create database
database created press continue
To continue click link “install basic configuration

Select your MARC flavor and press next continue
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

- Default MARC 21 bibliographic framework
  (marc21_framework_DEFAULT)

Optional

- Selected matching rules for MARC 21 bibliographic records, including:
  - ISBN
  - ISSN
select zebra or no-zebra for indexing and click choose button to continue. I choose zebra
click the finish button to complete installation
Click link “here” to continue or it will redirect after few seconds. The koha login for staff client page will appear.
Set system preference create import some records to test the Zebra indexing