Working on Server System of Koha

whoami

Sakib Ahmed

Assistant System Programmer

Ayesha Abed Library

Brac University

Bangladesh

Contacts

sakib.ahmed@bracu.ac.bd

sakibahmedsezan@gmail.com

Working on Server System of Koha

The outline of this course is as follows:

- Installation of KOHA
- Running Multiple Instances of Koha
- Zebra SearchEngine
- Koha as z39.50 server
- Mail Server Configuration
- Database maintenance and Job scheduler
  - Backup and Restore the database of KOHA
  - Cron Jobs
- Additional Configurations
  - Enabling Regional Language
  - SSL in Koha

Sakib Ahmed
Ayesha Abed Library
Brac University

Installation of Koha

Hardware Requirements:

- Desktop PC
- Workstation PC
- Server computer
- Cloud computing

Software Requirements:

- Linux OS
- Apache
- MariaDB or MySQL
- Perl

Installation process:

- Command Line
- Web installer
- Onboarding tool

Multiple Instances of Koha

- Apache port configuration
- Create new instance
- Configure new "sites.conf" in sites-available

Sakib Ahmed
Ayesha Abed Library
Brac University

Zebra SearchEngine

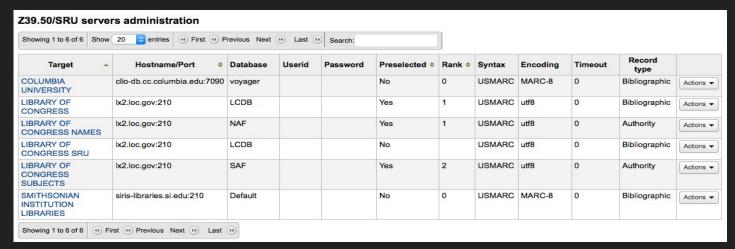Koha's databases are indexed by the Zebra open-source software
- Zebra is a high-performance, general-purpose structured text indexing and retrieval engine
- It reads records in a variety of input formats (eg. email, XML, MARC)
- Provides access to them through a powerful combination of Boolean search expressions and relevance-ranked free-text queries
- In Koha, Zebra is used to index all cataloged entries

We will be learning different command line combination to work with Zebra.

Sakib Ahmed
Ayesha Abed Library
Brac University

Koha as z39.50 server

Using z39.50 in Koha

- Get there: More > Administration > Additional Parameters > Z39.50/SRU Servers

Z39.50 is a client–server protocol for searching and retrieving information from remote computer databases, in short it's a tool used for copy cataloging

Z39.50/SRU servers administration

Showing 1 to 6 of 6   Show 20 entries   ⟪ First ⟨ Previous   Next ⟩   Last ⟫   Search:

Target	Hostname/Port	Database	Userid	Password	Preselected	Rank	Syntax	Encoding	Timeout	Record type	
COLUMBIA UNIVERSITY	clio-db.cc.columbia.edu:7090	voyager			No	0	USMARC	MARC-8	0	Bibliographic	Actions ▾
LIBRARY OF CONGRESS	lx2.loc.gov:210	LCDB			Yes	1	USMARC	utf8	0	Bibliographic	Actions ▾
LIBRARY OF CONGRESS NAMES	lx2.loc.gov:210	NAF			Yes	1	USMARC	utf8	0	Authority	Actions ▾
LIBRARY OF CONGRESS SRU	lx2.loc.gov:210	LCDB			No		USMARC	utf8	0	Bibliographic	Actions ▾
LIBRARY OF CONGRESS SUBJECTS	lx2.loc.gov:210	SAF			Yes	2	USMARC	utf8	0	Authority	Actions ▾
SMITHSONIAN INSTITUTION LIBRARIES	siris-libraries.si.edu:210	Default			No	0	USMARC	MARC-8	0	Bibliographic	Actions ▾

Showing 1 to 6 of 6   ⟪ First ⟨ Previous   Next ⟩   Last ⟫

Sakib Ahmed
Ayesha Abed Library
Brac University

Mail Server Configuration

Exim with Gmail as SMTP mail server

- Install Exim
- Configure Exim
- Create Gmail login credentials file
- Update configuration file
- Restart Exim
- Enable email service in Koha
  - koha-email-enable library

Postfix with Gmail as SMTP mail server

- Install Postfix
- Install required packages
- Configure Postfix main.cf
- Create Gmail login credentials file
- Restart the Postfix
- Enable email service in Koha
  - koha-email-enable library

Prepare Koha to send email message

- Enabled Enhanced Messaging preferences
- Overdue Notice/Status triggers
- Enable messaging preferences for each patron categories

Sakib Ahmed
Ayesha Abed Library
Brac University

Database maintenance and Job scheduler

Database Backup & Restore

Koha uses Mysql database as database engine for its backend. Using simple mysql command we can backup/dump the databases and can restore back whenever needed.

- Database Backup
  - $ mysqldump -u koha -p password > /opt/koha.sql
- Database Restore
  - $ mysql -u koha -p password < /opt/koha.sql

Cron Jobs

A cron job is a Linux command for scheduling a command or script on your server to complete repetitive tasks automatically.

- Monthly
- Daily
- Hourly
- At a fixed time

Sakib Ahmed
Ayesha Abed Library
Brac University

Additional Configurations

Regional Language in Koha

- Staff interface in regional languages
- Search with regional languages
- On-screen Keyboard with regional languages

SSL in Koha

HTTPS (HyperText Transfer Protocol Secure) requires a TLS certificate to be installed on the server. TLS is also known as SSL (Secure socket layer).

Free SSL certificates

- Self-Signed Certificates
- Free SSL certificate signed by a Certificate Authorities (CA)

Sakib Ahmed
Ayesha Abed Library
Brac University

I wish you well during this challenging time.
Hope everyone keeps safe!