

Open Source Web Content Management Technologies for Libraries



CALIBER
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Pre-Conference Tutorial
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Agenda

- The Current Information Landscape
- Open Source Overview
- The OS Treasure Trove
- Categories of Open Source Software for Libraries
- Open Source Digital Library Systems
- Open Source Suite from PKP, SFU
- KOHA
- Greenstone
- DSpace
- PKP OAI Harvester
- Drupal Content Management System
- Discussion

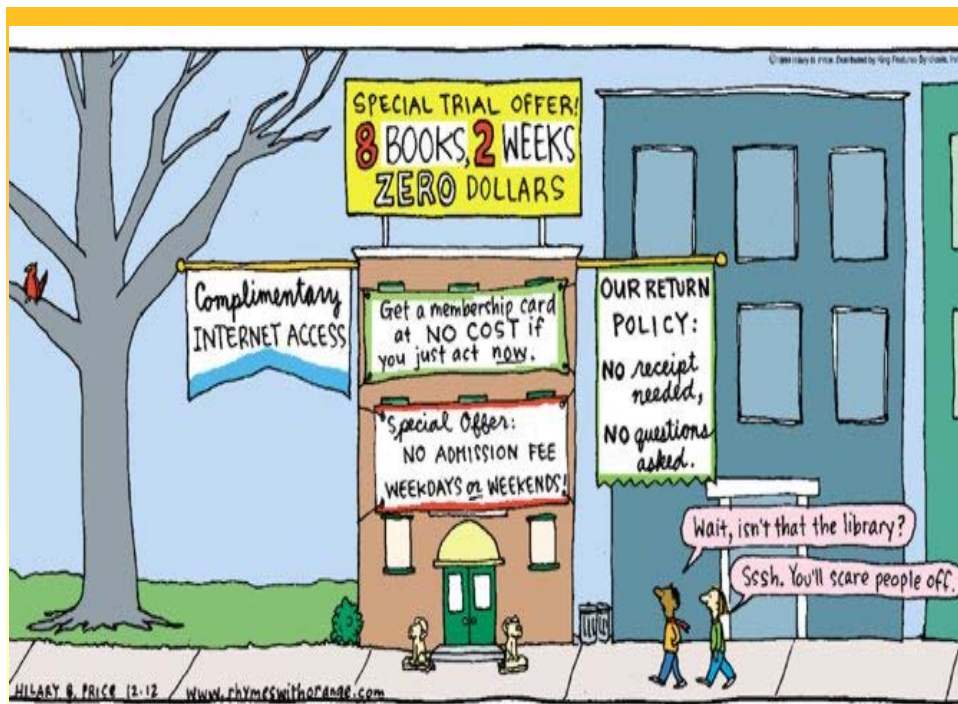
Foreword

- Demand for improved information and knowledge management solutions - universities, enterprises and institutions
- Digital Libraries gaining increasing social attention, academic and research interest
- Need for Integrated access to disparate information resources
- Key challenge - how to create online information environments facilitating internal content publishing and single point access to internal/external information sources
- Latest DL technologies Vs Traditional libraries and knowledge management
- Options before us – Proprietary Vs Open Standards / Open Source Software
- Fortunately we have a plethora of Open Source Solutions available for Library applications

The Current Environment

- Fascinating times in the history of libraries, information systems and electronic publishing
- Possibilities of building large-scale services
 - Collections are in digital formats and
 - Retrieved over networks
- Materials are stored on computers
- Network connects the computers to personal computers on the users' desks
- In a complete digital library, nothing need ever reach paper

Feel of the Hour



Need of the Hour

Future Libraries?

What is a library and what should it be in 2012, 2020 and beyond...

- What does the academic library of the future look like?
- Where do its walls begin and end?
- On campus?
- On our desktop?
- At home?
- Does it still have a function as a separate and distinct space?
- Or has it become the first step to an all-virtual future?
- Libraries have never been more interesting, difficult and challenging...

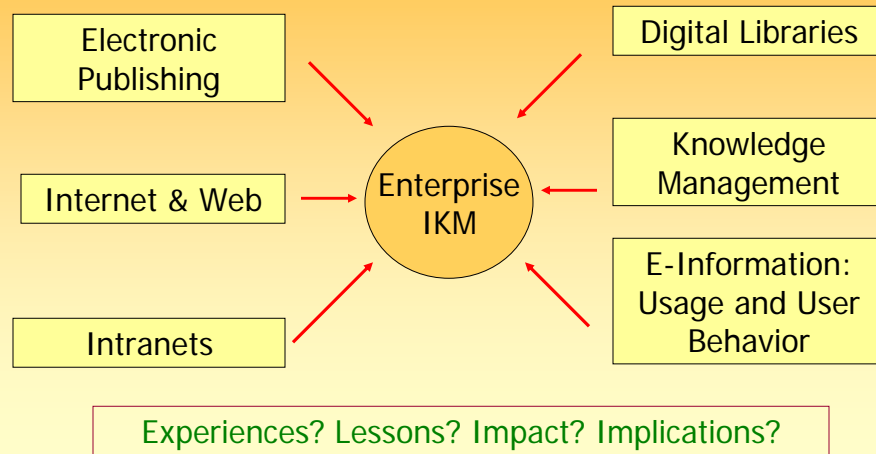
Challenges of the Day

- ✓ **Relevance of Libraries in the Google Era**
- ✓ **Retention of Users, especially the New Gen**
- ✓ **Proliferation of Content**
- ✓ **Diverse Datastreams - Content Categories, Publication Types**
- ✓ **Multimedia, Polymedia, Multiformats**
- ✓ **Collection Building – Acquisition, Subscriptions, Licensing...**
- ✓ **Copyright, Intellectual Property, Fair Use...**
- ✓ **Technology Complexities, Infrastructure Issues**
- ✓ **Publishers' Stringent Policies / Monopolies**
- ✓ **Integration of legacy systems and the new genre**

Information Strategy Tips

- ✓ **Context = Scenarios, Paradigms**
- ✓ **Constant = Change**
- ✓ **Technology = Facilitate, and NO intimidate**
- ✓ **Information = The Big Picture - Landscape**
- ✓ **Content = Aggregate, Integrate**
- ✓ **Service = Markup, Market**
- ✓ **Capital = Human, Tacit, Values, and Users**

Factors of Change

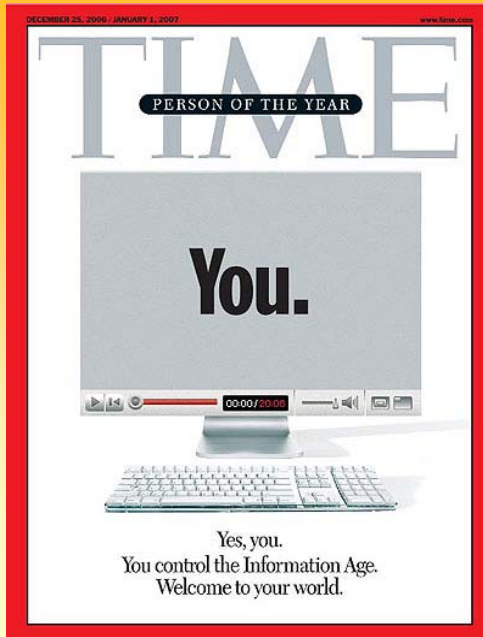


IM: Key Goals

- Develop and manage a dynamic, unified information resource base (content repository) that gathers and organizes relevant internal and global information resources, based on a taxonomy of information needs of the enterprise, and make these available for learning and informed decision making.

IM : Key Goals...

- Support different manifestations of information sources – implicit/explicit, print/digital, local/remote, free/commercial, etc.
- Support for delivering personalized information services to staff, both on demand and in anticipation.



- **User Generated Internet Content:**

- Blogs
- YouTube
- MySpace

- **And the same is TRUE with Scholarly Communication too!!**

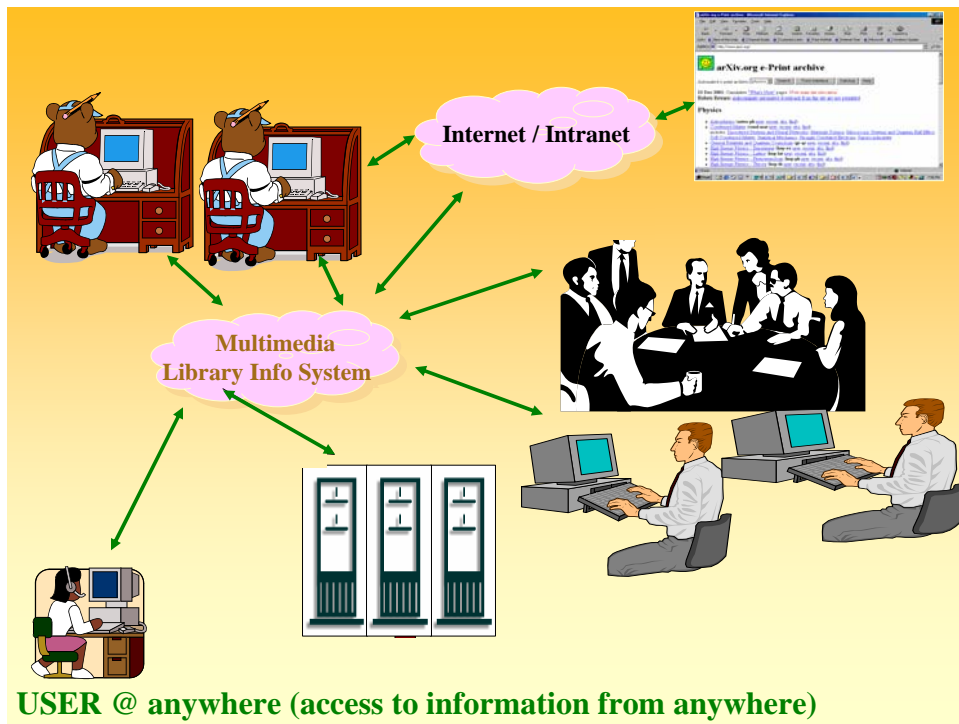
Top Tech Trends in IT / LIS

- **Web 2.0 / Library 2.0**
- **Blogs / RSS Feeds / Wikis / Podcasts / Webcasts**
- **Open Source Software, Open Standards, Open URL**
- **User Tagging, Automated Tagging**
- **Web OPACs, and Interface Design**
- **Seamless Integration / Aggregation**
- **OA -> OAP + OAA**
- **Open Resource Discovery Tools - Google Scholar**
- **E-Books, E-Journals, E-Resources**
- **Harvesting, Federation, Metasearching**
- **Digital Rights Management**

L 1.0

L 2.0

Closed stacks	-->	Open stacks
Collection development	-->	Library suggestion box
Preorganized ILS	-->	User tagging
Walk-in services	-->	Globally available services
"Read-only" catalog	-->	Amazon-style comments
Print newsletter mailed out	-->	Team-built blog
Easy = dumb users	-->	Easy = smart systems
Limited service options	-->	Broad range of options
Information as commodity	-->	Information as conversation
Monolithic applications	-->	Flexible, adaptive modules
Mission focus is output	-->	Mission focus is outcome
Focus on bringing 'em in	-->	Focus on finding the user
ILS is core operation	-->	User services are core



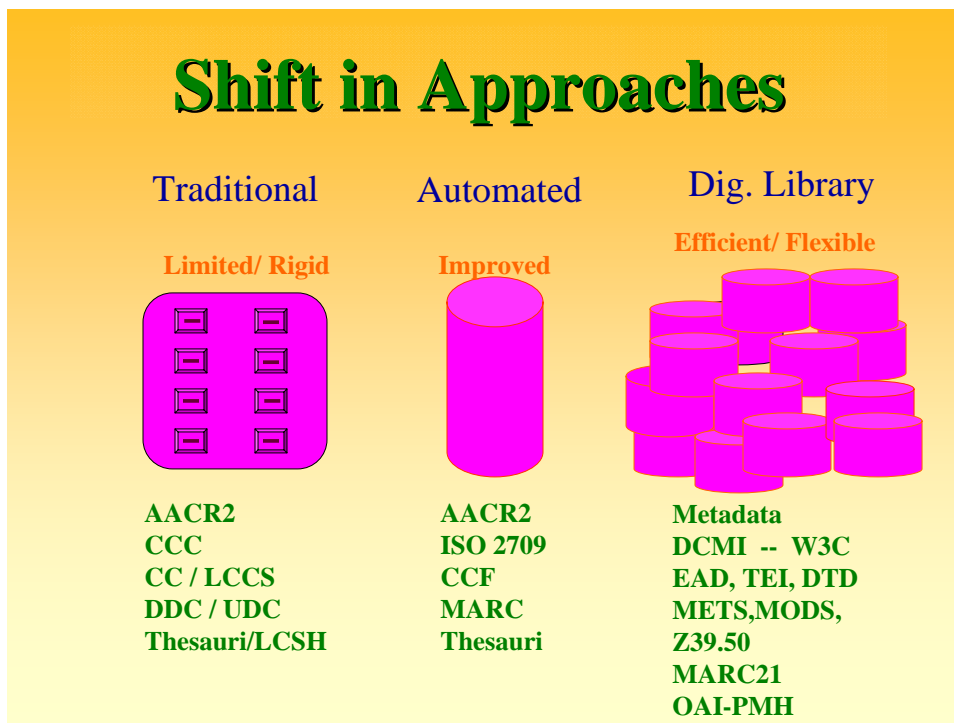
Penetration of E-Content in Libraries

PUBLICATION TYPES

- E-Books, E-Journals...
- Aggregated Scholarly E-Journal Databases
- Databases, CBT/ WBT
- Portals, Vortals...
- Value added services
- Preprints, Eprints, E-Documents....

DOCUMENT FORMATS

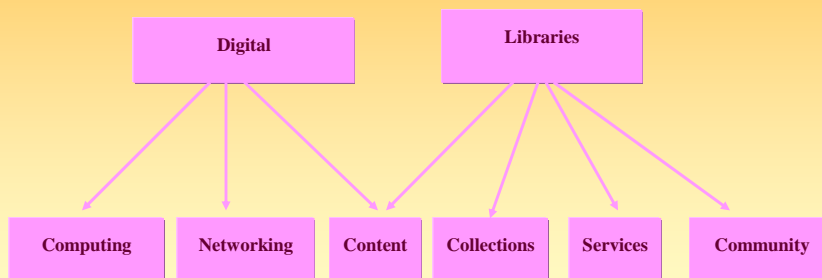
- ASCII, RTF, HTML, SGML, Postscript, PDF, Proprietary, Native Application Formats
- Images, Graphics
- Audio
- Video
- XHTML, ASP, PHP, XML ...



What Distinguishes a DL?

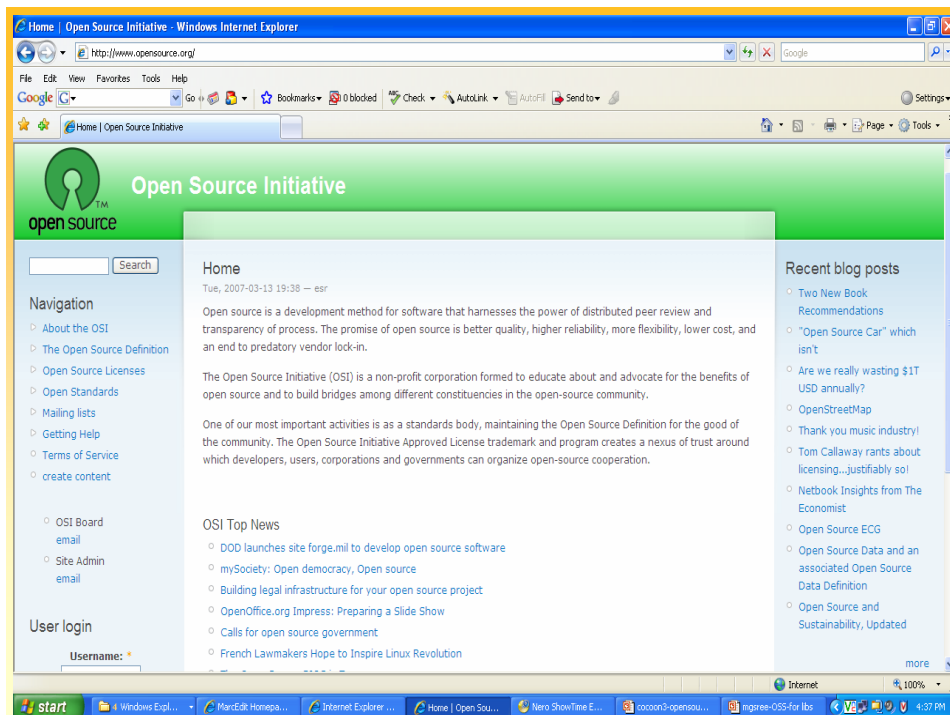
- Site Neutrality (3 in 1 Access-Anytime, Anywhere by Anyone Access)
- Open Access
- Greater variety and granularity of information
- Sharing of information 'Sharium'
- Up-to-date ness
- Always available (365*7*24)
- New forms of rendering (New Genre)

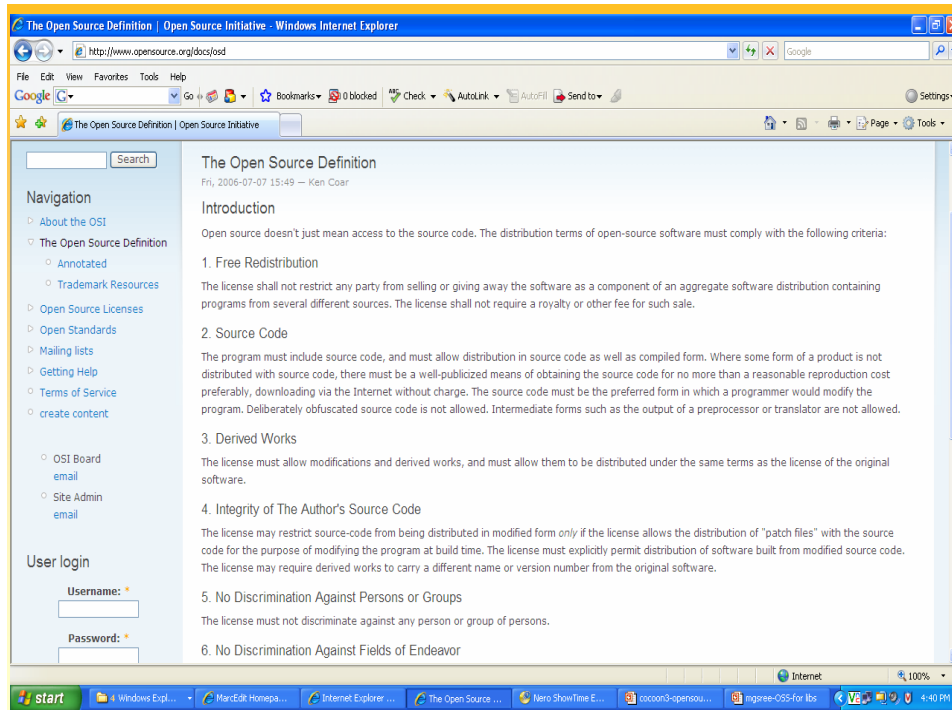
Digital Libraries: An Overview



What is open source software?

- In the phrase *open source*, *source* refers to source code, the human-readable computer code which is the origin, or source, of the computer application.
- *Open* refers to the terms of access to that computer source code.
- So *open source* software is software for which the source code is freely available.





Advantages and Disadvantages

Advantages

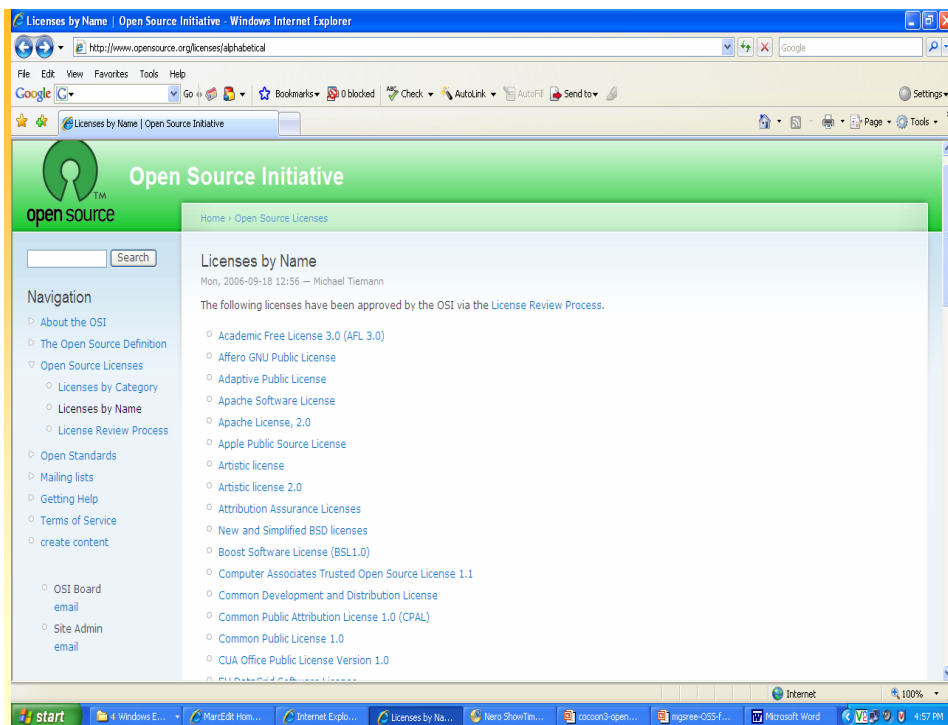
- Mostly issued under an internationally accepted License
- Access to source code *and ability and right to modify it*
- Right to redistribute modifications to benefit wider community
- Free
- Excellent support networks
- Large and enthusiastic user base

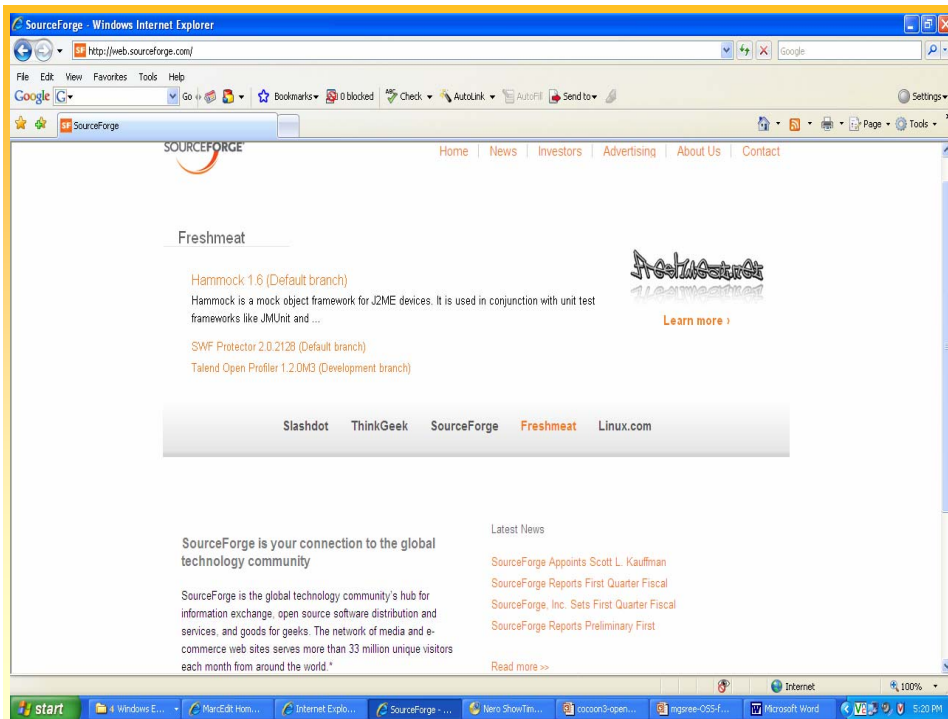
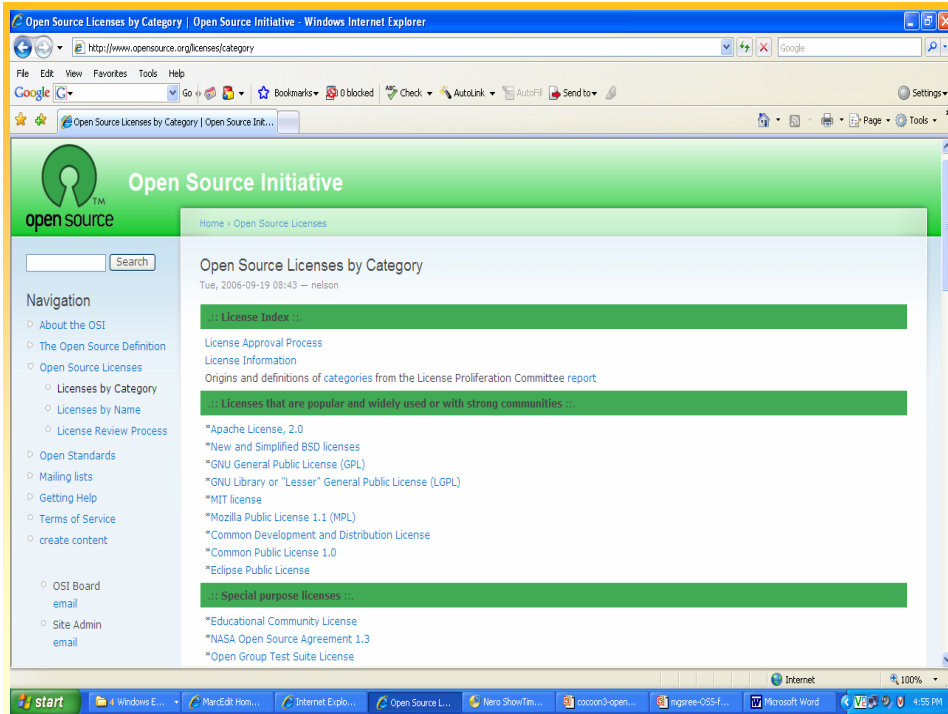
Disadvantages

- Limited or no accountability
- Informal and unaccountable support channels

Different Open Source Licenses

- GNU GPL ("General Public License")
- GNU Lesser GPL
- BSD License
- Mozilla Public License
- IU Open Source License
- And more...





Sourceforge.net: Software Search - Windows Internet Explorer

http://sourceforge.net/search?type_of_search=soft&words=dspace

SOURCEFORGE.NET Log in Create account Community Jobs Help Search

Search results in projects found for "dspace" Search Help

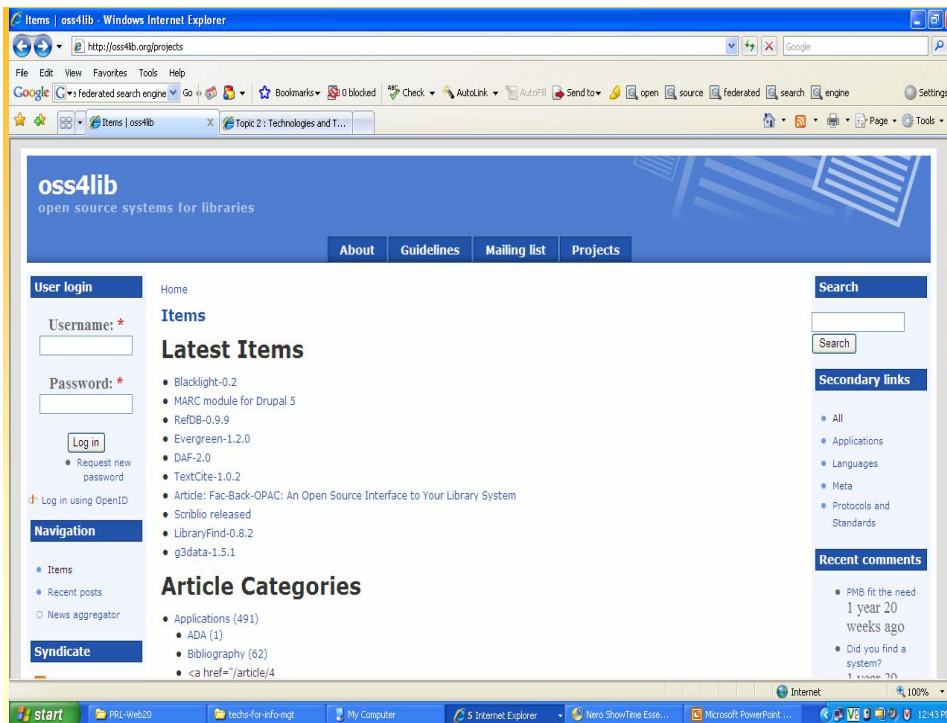
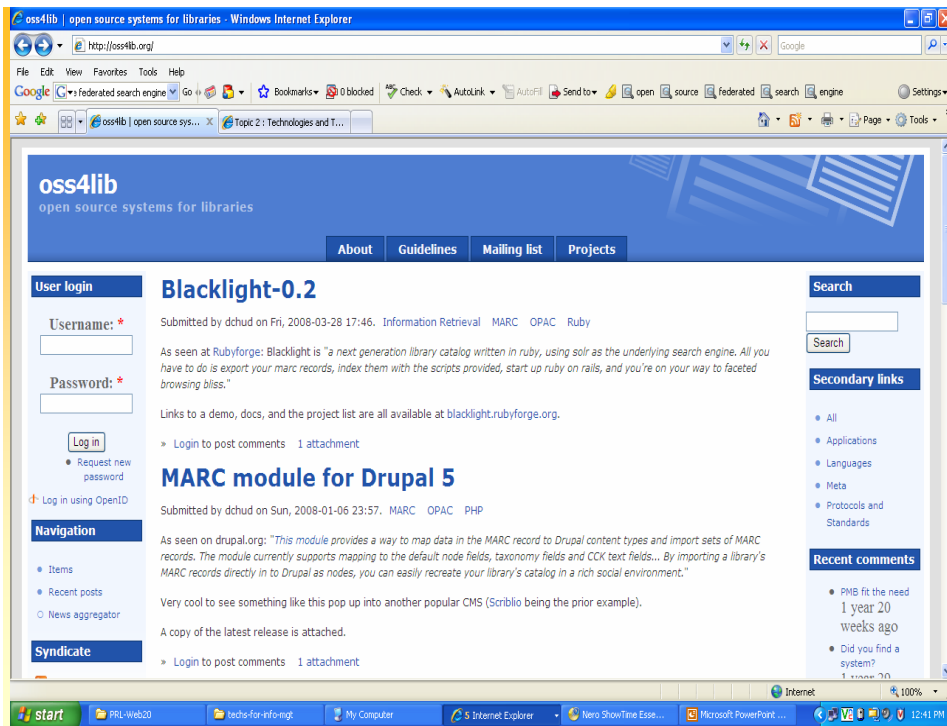
Results 1 - 10 of 12 Display: Details Images Filters View: 10

Exact matches found: [dspace](#) (Unix name: dspace), [DSpace](#) (Unix name: dspace), [Dspace](#) (Unix name: rudspace)

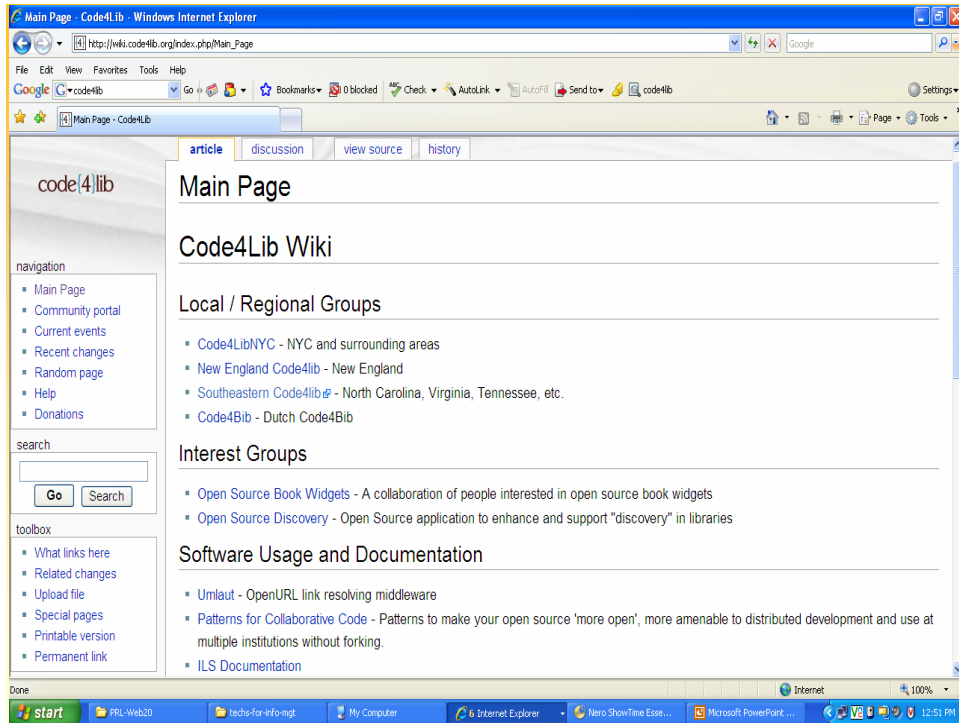
Name	Relevance	Activity	Rank	Registered	Latest File	Downloads
DSpace	—	99.22%	1,867	2001-02-06	2008-09-10	116,757
<p>Open Source Digital Asset Management system that enables services for access, provision, stewardship and re-use of digital assets with a focus on educational and research materials</p> <p>Services (2) Members (17) Download</p> <p>Topic: Archiving, Library</p>						
Trackback for DSpace	—	91.23%	21,091	2008-11-24	2008-11-26	17
<p>Enable DSpace for the Trackback protocol. This code was developed under the JISC funded Claddier and Storelink projects.</p> <p>Members (1) Download</p> <p>Topic: MARC and Book/Library Metadata</p>						
DSpace Comment Add-on Search	—	65.03%	84,056	2007-05-04	2007-05-09	25

A Good Starting Point

- oss4lib: Open Source Systems for Libraries
 - www.oss4lib.org







Open Source Resources

- [Open Source Initiative](#)
- [GNU](#)
- [SourceForge](#)

Categories of Open Source Software

- **Operating Systems**
 - Linux, Free / Open BSD, Open Solaris...
- **Programming Languages**
 - Perl, PHP, Python
- **Applications**
 - Apache, Tomcat, emacs, grep, MySQL, sendmail, ssh

Open Source Software for DLs

- Linux, Apache, Tomcat, PHP, Perl, DLXS, ImageMagick, Unreal Media Server, Greenstone, DSpace, ePrints, FEDORA, CDSWare, MySQL, Darwin Streaming Server, emacs, CVS, Webalizer, LibXML, LibXSLT, Saxon, and more!

Some categories of open source library software

- Library-oriented search engines
 - Cheshire, Pears, dbWiz...
- Z39.50 toolkits
 - ZetaPerl (Perl), **JAFER** (Java), YAZ (C/C++), Mercury Z39.50 Client...
- MARC parsers
 - **MARC.pm** (Perl), **MARC4J** (Java)
- MarcEdit
<http://oregonstate.edu/~reese/marcedit/html/index.php>
- Image processing
 - **ImageMagick**, **tiffinfo/tiffdump**

Some categories of Open Source Library software / Open Standards

- Portals
 - MyLibrary
- OAI service providers and data providers
 - **PHP OAI Data Provider**
 - Lots! See www.openarchives.org
- METS tools
 - Page turners, toolkits, more: see www.loc.gov/mets/
- Dublin Core
 - <http://dublincore.org>

Web Server

- **Apache**
- **Lots in Java! see at...**
 - <http://java-source.net/open-source/web-servers>

Database Management Systems (DBMS)

- **MySQL**
- **PostgreSQL**
- **mSQL**
- **CDS/ISIS, Win/ISIS, GenISIS etc.**

Web Server-Side Scripting

- **PHP**
 - **Architecture**
 - **Linux, Apache, MySQL, PHP (LAMP)**
 - **Windows, Apache, MySQL, PHP (WAMP)**

Web Services

- **Apache Tomcat Web Container/Service**
- **Apache Cocoon Content Framework/Service**
- **Apache Ant Build Tool**

Integrated Library Management System (ILMS)

Managing legacy systems

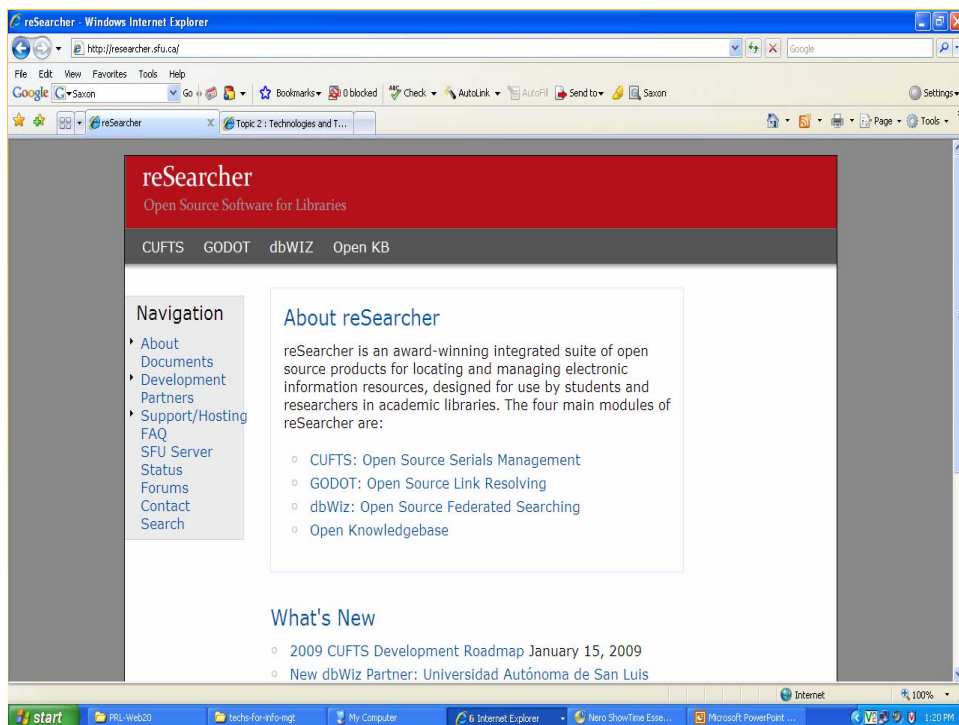
- **KOHA**
 - <http://www.koha.org/>
- **Evergreen**
 - <http://wiki.code4lib.org/index.php/Evergreen>
- **Emilda**
 - <http://wiki.code4lib.org/index.php/Emilda>
- **OpenBiblio**
 - <http://wiki.code4lib.org/index.php/OpenBiblio>
- **phpMyLibrary**
 - <http://wiki.code4lib.org/index.php/PhpMyLibrary>
- **NewGenLib**
 - <http://www.verussolutions.biz/>

Server Log Analysis

- **Webalizer**
 - <http://www.webalizer.org/>

Z39.50 Protocol for online/remote Search & Retrieval (<http://www.loc.gov/z3950/>)

- Interoperability standard (ANSI/NISO Standard) and a software which facilitates cross-database/archives search
- A client-server protocol for searching and retrieving information from remote computer databases
- **YAZ Z39.50 Client** - <http://indexdata.com/yaz/>
- **'Mercury' Z39.50 Client** - <http://www.basedowinfosys.com/projects/mzc>



Serials Manager

- **CUFTS**
 - <http://researcher.sfu.ca/cufts>

Citation Manager

- **Citation Manager** (from PKP, Simon Fraser University, Canada)
 - Bibliographic Management (<http://researcher.sfu.ca/cm>)

Link Resolving

- **GODOT** - Electronic (Online) Resources Management
 - <http://researcher.sfu.ca/godot>

Open Journal Publishing

- **OJS**
 - <http://pkp.sfu.ca/ojs>

Open Conference Systems

- **OCS** : Conference workflow automation
 - <http://pkp.sfu.ca/ocs>

Open URL Systems

- **Open URL 1.0**
 - <http://www.oclc.org/research/software/openurl/default.htm>

Open Digital Libraries

- **Greenstone**
- **DSpace**
- **Eprints**
- **FEDORA etc.**

Open Access Archives / IRs

- **DSpace**
- **Eprints**
- **FEDORA**
- **CDSWare**
- **Greenstone etc.**

Learning Management Systems (LMS)

■ **E-learning Systems**

- Moodle
- Manhattan etc.

Content Management Systems (CMS)

- Drupal
- Joomla
- MediaWiki
- Wordpress

Open Archives Harvester

- **Harvester**

- <http://pkp.sfu.ca/harvester>



Federated Searching

- **dbWiz : PKP Project**
 - <http://researcher.sfu.ca/dbwiz>
- **Google Custom Search**
 - <http://www.google.com/coop/cse/>

dbWIZ: Open Source Federated Searching | reSearcher - Windows Internet Explorer

http://researcher.sfu.ca/dbwiz

reSearcher
Open Source Software for Libraries


CUFTS GODOT dbWIZ Open KB

Navigation

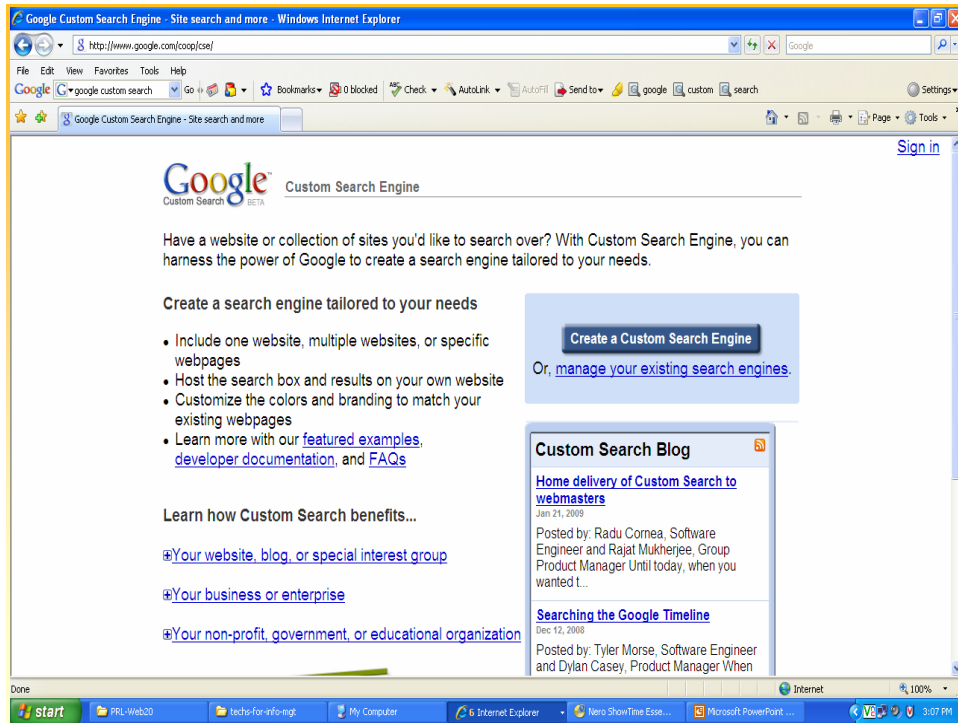
- About
- Documents
- Development
- Partners
- Support/Hosting
- FAQ
- SFU Server
- Status
- Forums
- Contact
- Search

dbWIZ: Open Source Federated Searching

dbWiz provides library users with a single interface for searching a wide range of library resources, and returns records in an integrated result listing.



You can also embed a dbWiz search box into any web page, including your library's home page, your subject guides, or even an instructor's course page. dbWiz makes integrating library research into your school's courses easy and fun.



Social Computing/Software

- Blogs
- Tags
- Wikis
- RSS
- Feed Aggregation etc.

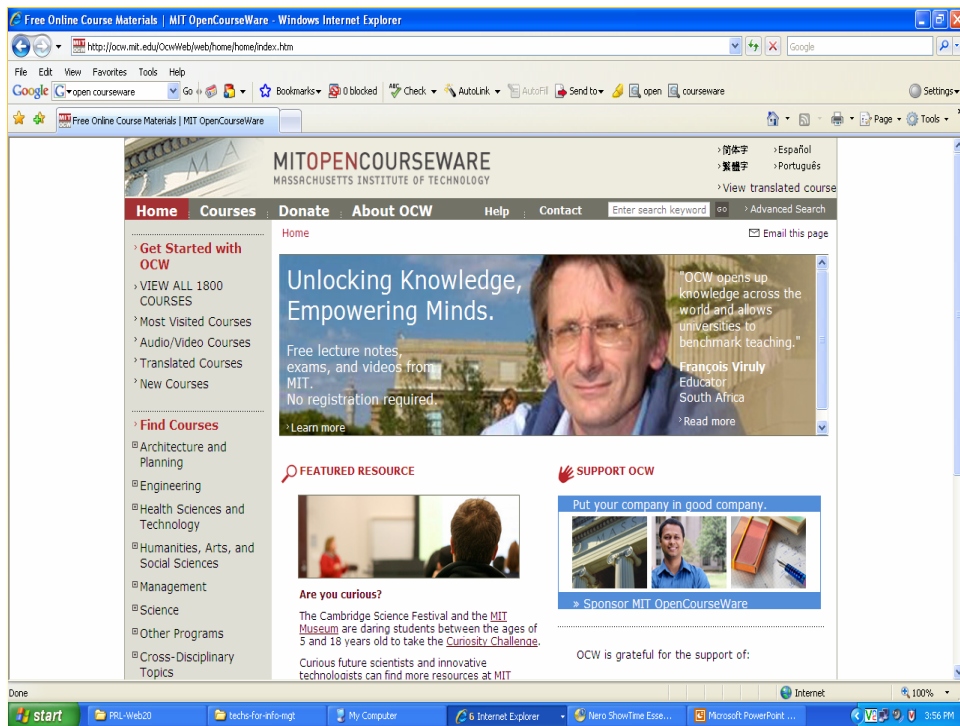
Open Courses

- WWW.W3SCHOOLS.COM
- Open Courseware <http://ocw.mit.edu/>

The screenshot shows a Windows Internet Explorer browser window displaying the W3Schools website. The address bar shows the URL <http://www.w3schools.com/>. The website header includes the W3Schools logo, the tagline "The best things in life are free.", and a search bar. Below the header is a navigation menu with links for HOME, HTML, XML, CSS, JAVASCRIPT, SQL, and MORE... The main content area features a large banner with the text "THE LARGEST WEB DEVELOPER SITE ON THE NET FULL WEB BUILDING TUTORIALS - ALL FREE!". The page is organized into several columns of content:

- TUTORIALS**:
 - HTML Tutorials**: Learn HTML, Learn XHTML, Learn CSS, Learn TCP/IP
 - XML Tutorials**: Learn XML, Learn DTD, Learn XML DOM, Learn XSLT, Learn XSL-FO, Learn XPath, Learn XQuery, Learn XLink, Learn XPointer, Learn Schema, Learn XForms, Learn SOAP, Learn WSDL
- WEB BUILDING TUTORIALS**:
 - HTML and XHTML
 - Styling with CSS
 - All XML Languages
 - Browser Scripting
 - Server Scripting
 - SQL and Database
- WEB BUILDING REFERENCES**:
 - All HTML Tags and Attributes
 - Full CSS 1.0 and 2.0
 - XML References
 - JavaScript and DOM
 - PHP and ASP
 - Colors and Character Sets
- EXAMPLES IN ONLINE EDITOR**:
 - Thousands of Examples
 - Online Text Editor
 - Test the Examples Yourself
 - Experiment with the Code
 - Cut and Paste
- DEVELOPERS CERTIFICATES**:
 - HTML Certification
 - JavaScript Certification
 - XML Certification
 - ASP Certification
 - PHP Certification
- REFERENCES**:
 - HTML 4.01
 - XHTML 1.0
 - CSS 2.0
 - JavaScript
 - HTML DOM
 - XML DOM
 - PHP 5.1
 - XSLT 1.0
 - XPath 2.0
 - XSL-FO
 - WML 1.1
 - HTML Colors
- CHARACTER SETS**:
 - HTML Character Sets
 - HTML ASCII Codes
 - HTML ISO-8859-1
 - HTML Symbols
- EXAMPLES**: (Section header with no visible content)

The browser's taskbar at the bottom shows the Start button, several open applications (PRL-Web20, tech-for-informig, My Computer, Internet Explorer, Nero ShowTime Esse..., Microsoft PowerPoint...), and the system tray with the time 3:59 PM.



Integrated Library Management Systems (ILMS)

Library Automation is the Foundation to all Library Modernization Activities

- **Proprietary Solutions are Expensive**
- **HighTech ILMs Packages are very much available in the OSS Domain**
- **Selection of the Software is to be done judiciously as the success or failure may have lasting impacts**
- **For this tutorial, KOHA ILMs is showcased**

Features of ILMs

- Separates software functions into discrete programs called modules, and integrated then into a unified interface.
- **Acquisitions** (ordering, receiving, and invoicing materials),
- **Cataloging** (classifying and indexing materials),
- **Circulation** (lending materials to patrons and receiving them back),
- **Serials** (tracking magazine and newspaper holdings), and the
- **OPAC** (public search/retrieval interface for users). Each patron and item has a unique ID in the database that allows the ILS to track its activity.

Features of KOHA

- Koha is an open-source Integrated Library System (ILS).
- It supports global standards including MARC 21 bibliographic format;
- Z 39.50 information retrieval protocol;
- Web-centric architecture (no additional software/utility is required at the client side).
- Provides tremendous freedom for customization.
- Has all the modules of LMS (Acquisition, Cataloguing, Circulation, OPAC, Membership Management, System Administration, Serial Control, etc.)
- Web based OPAC system (allows the public to search the catalogue in the library, from campus and at home).

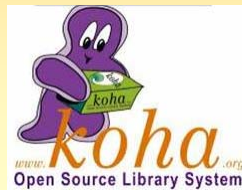
Features of KOHA...

- The software is UNICODE compliant. The creation and retrieval of Indic script based documents is possible.
- Export/Import and backup/restoration facilities are available.
- Includes features of fourth generation Library Management Software (LMS).
- Runs on Linux, Unix, Windows and MacOS platform.
- Koha uses Apache Web server, MySQL as backend RDBMS and Perl (Programming language for server-side scripting).
- All these softwares are open source.

KOHA on Windows

Installation

(XP/2000 Server)



OS / Software Requirements

- Windows XP/2000/Server
- Webserver- Apache
- Database- MySQL
- Programming Language - Perl

Installation

- Apache-2.0.63

http://www.apache.org/dist/httpd/binaries/win32/apache_2.0.63-win32-x86-no_ssl.msi

- MySQL-4.1

<http://dev.mysql.com/downloads/mysql/4.1.html>

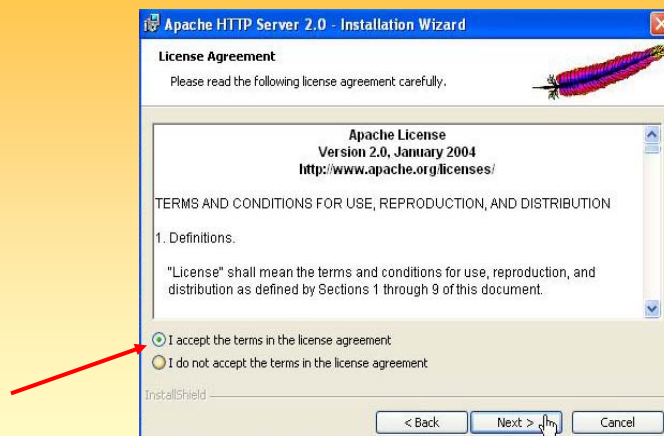
- ActivePerl-5.8.8.822-MSWin32-x86

<http://downloads.activestate.com/ActivePerl/Windows/5.8/ActivePerl-5.8.8.822-MSWin32-x86-280952.msi>

- Koha (2.2.9-W32-R1)

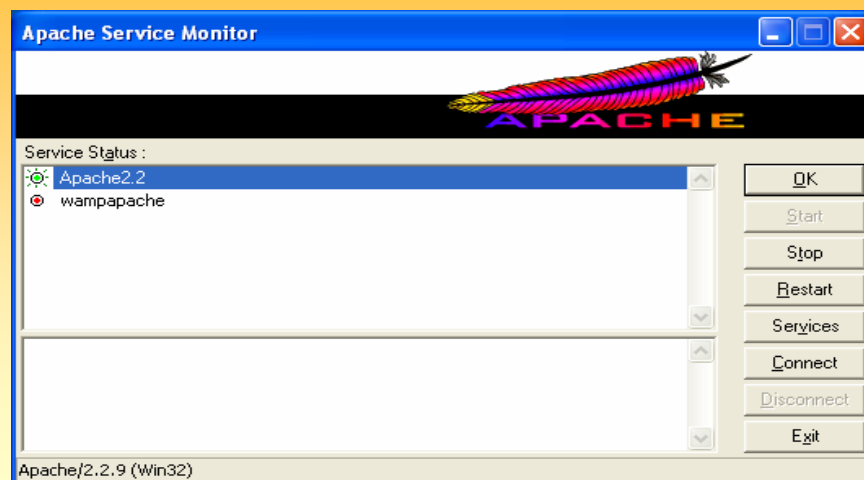
<http://www.koha.rwjr.com/downloads/Koha2.2.9-W32-R1.EXE>

Click on Apache Source and Run

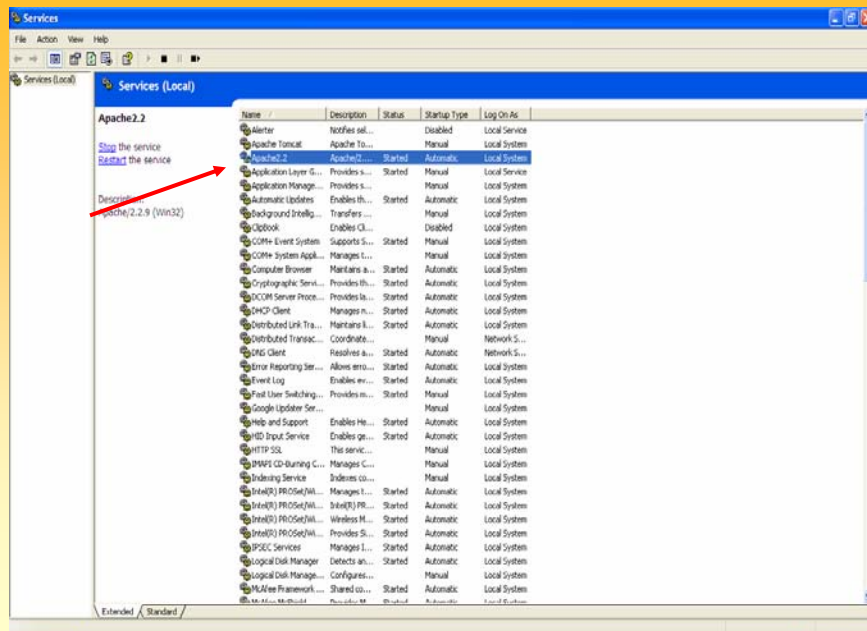
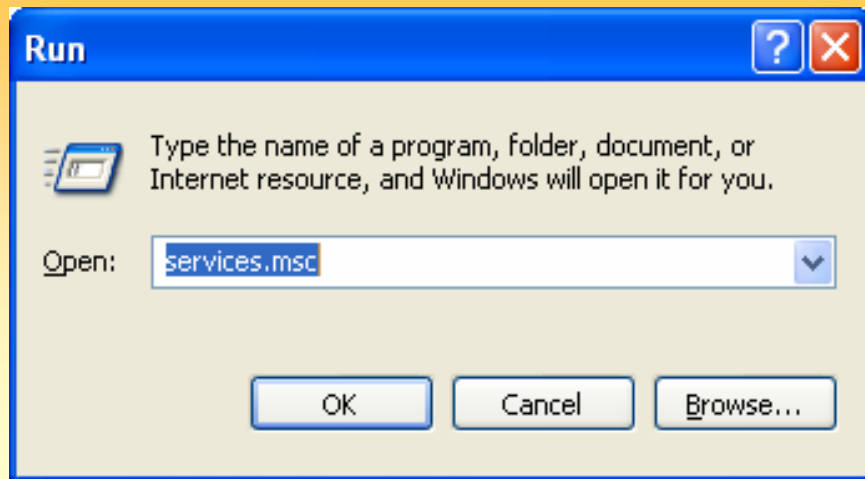


Server Details ...

- **Network Domain** - localdomain
- **Servername** - localhost
- **Administrators Email** - your email-ID
- **Install for all Users** on Port 80
- Select Set up Type as “**Typical**”
- Destination Folder – **Default**
- Go ahead and **Install**
- Once the Apache installation wizard completes its task, you will find a Feather Icon in your System Tray

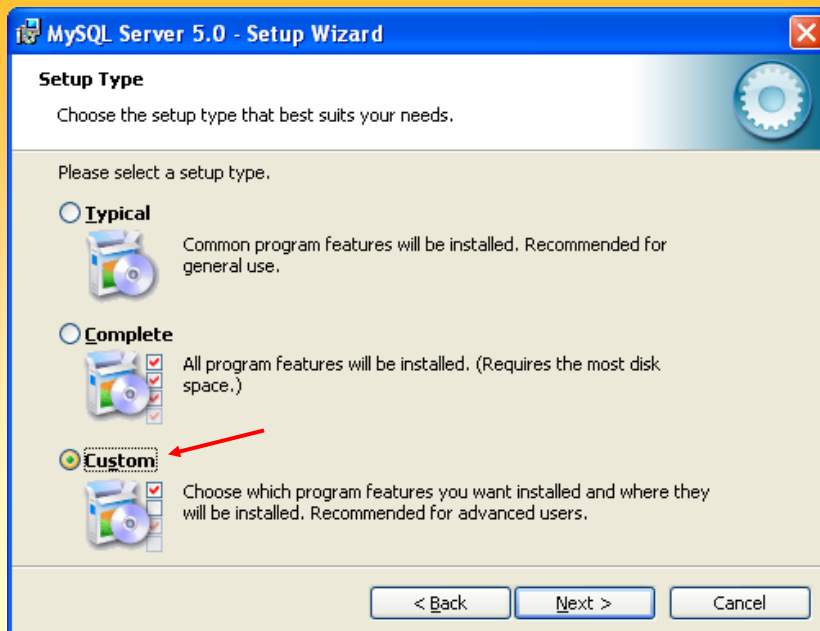
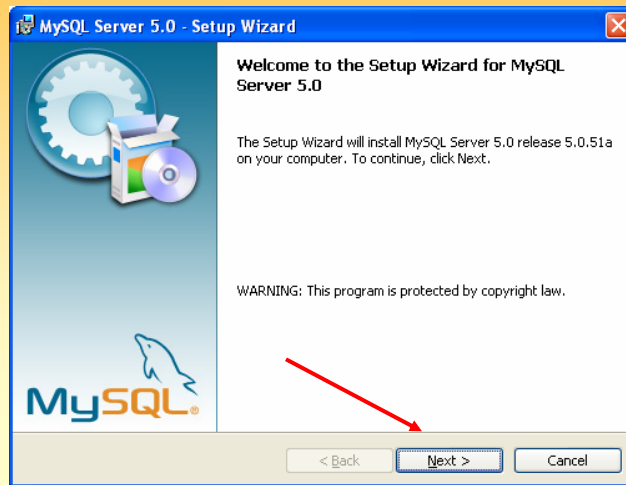


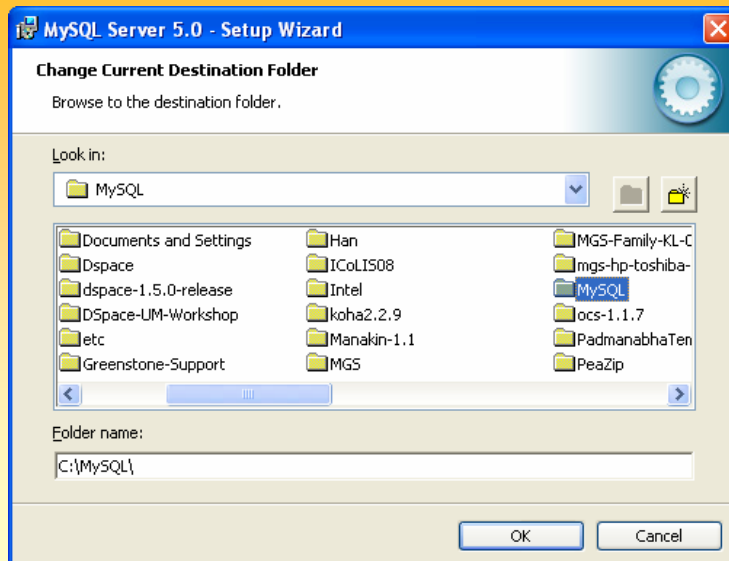
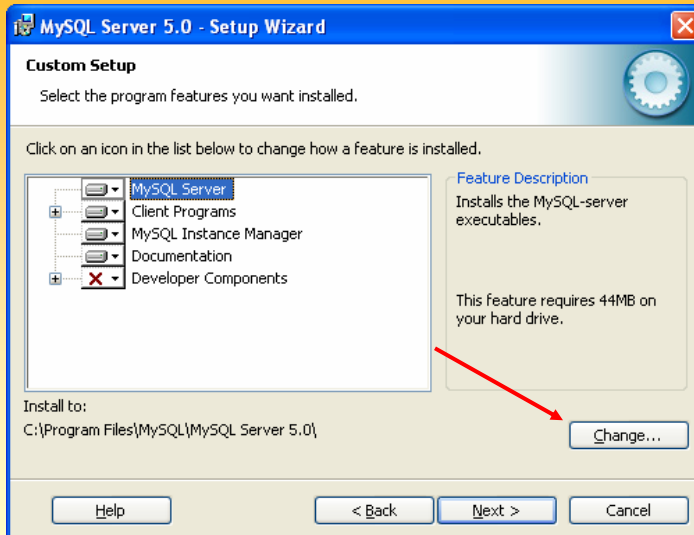
You can now Start/Stop Apache

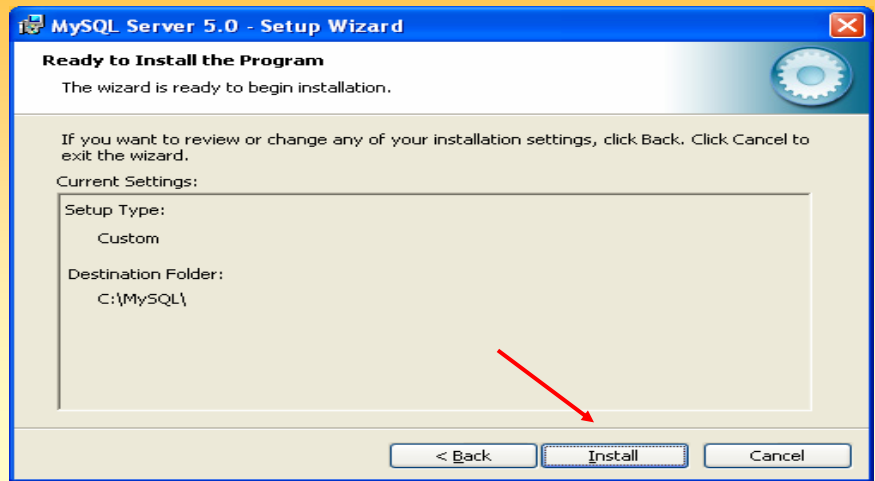
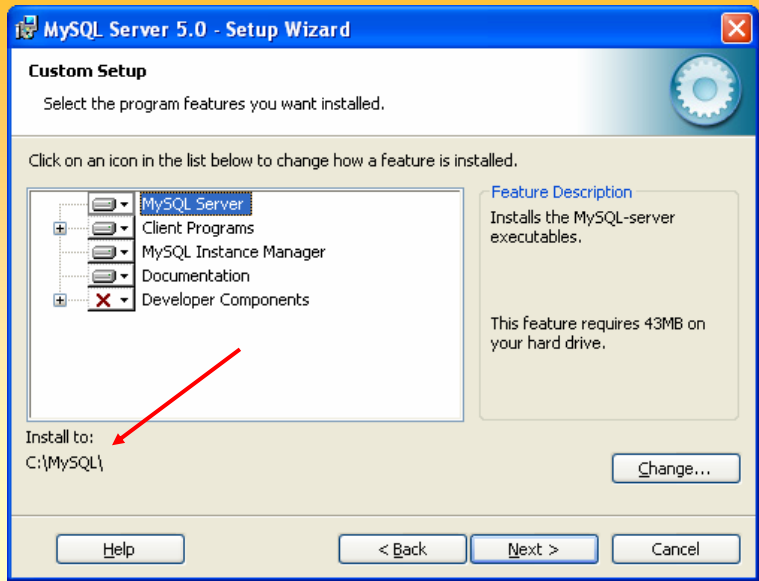


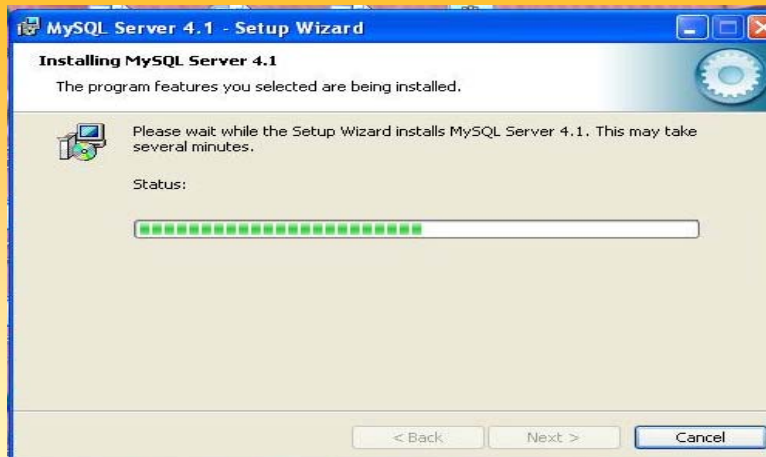
Installing MySQL

Click on MySQL Setup
Create a Folder "MySQL" in C:\

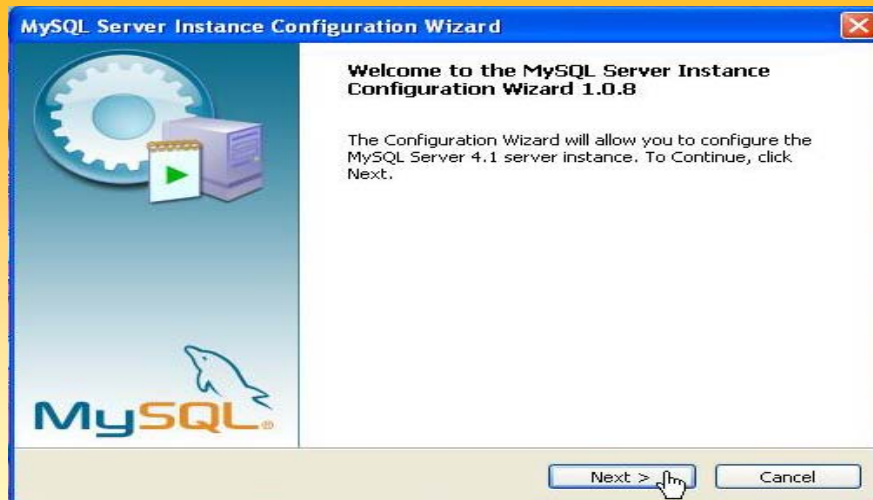






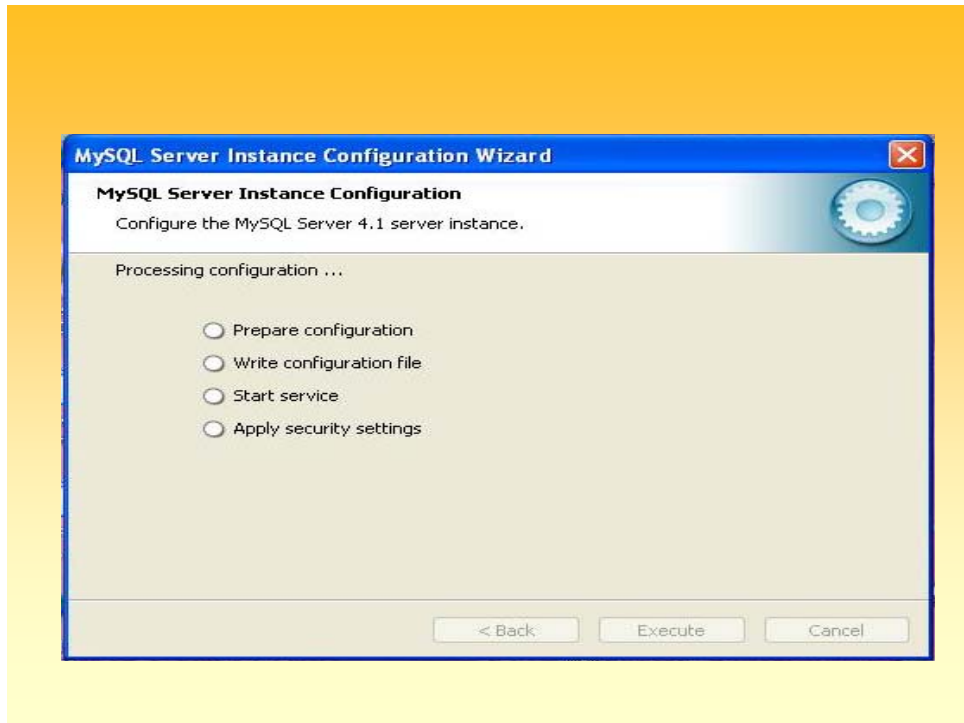
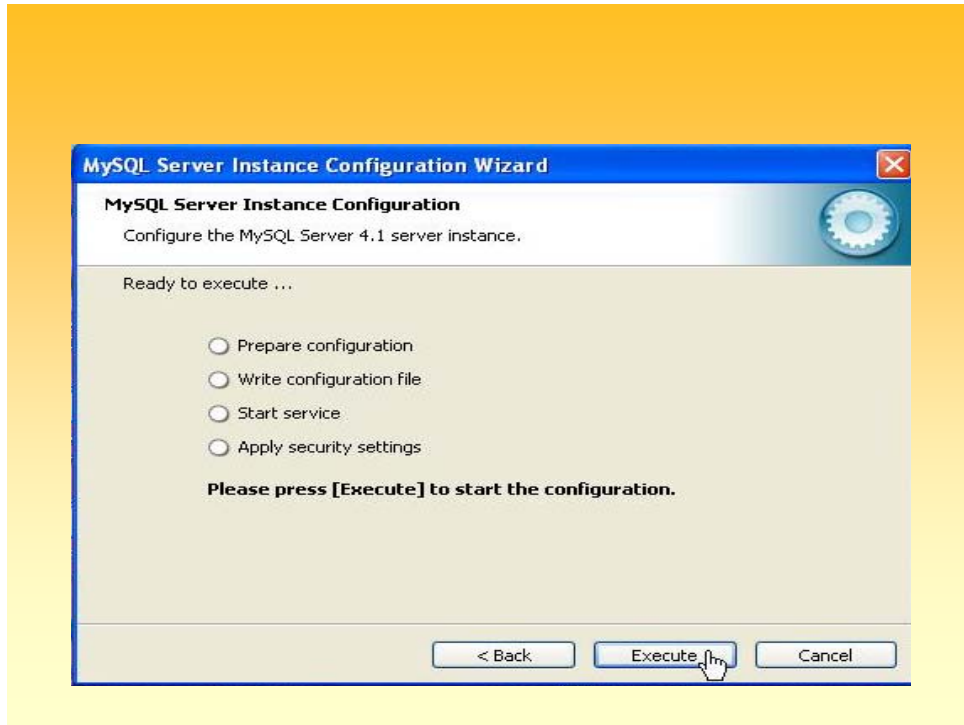


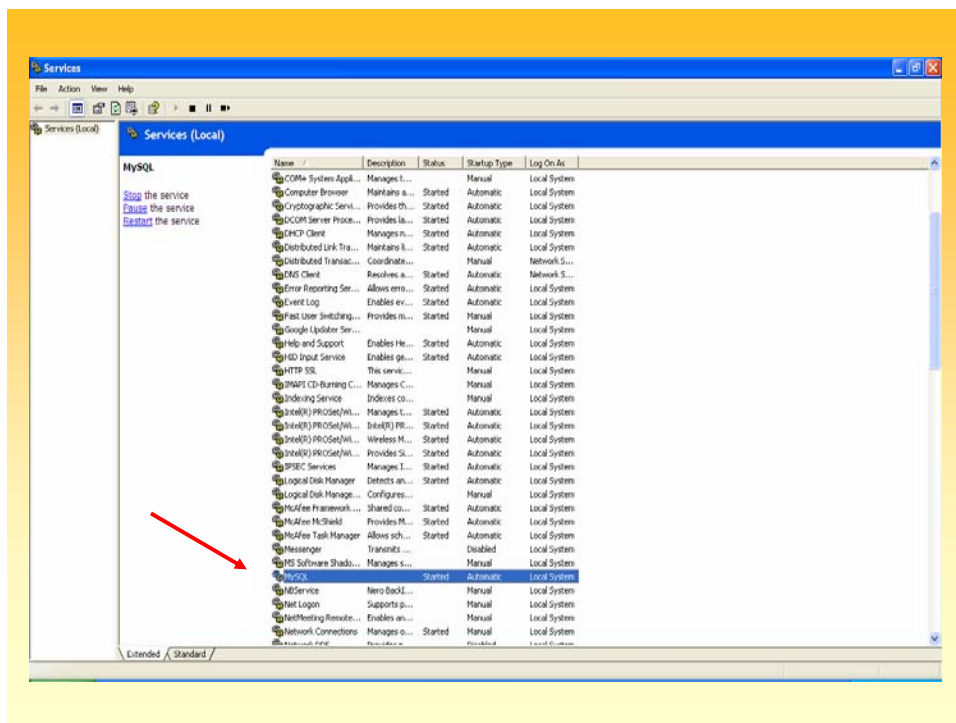
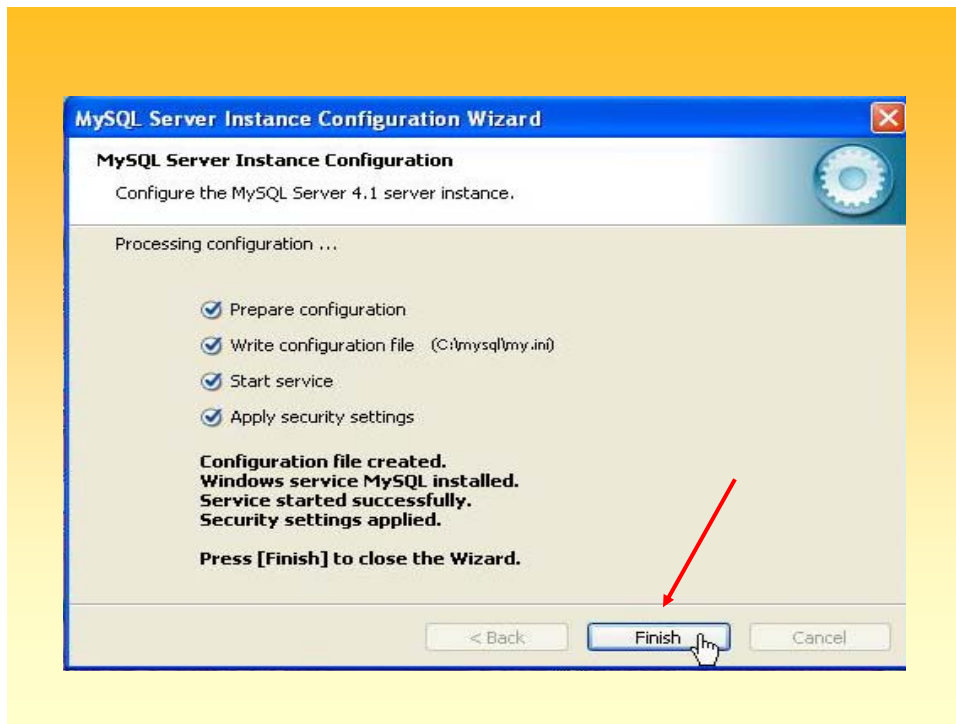
You will be asked for MySQL.Com Sign Up which you can Skip by selecting Skip Sign-Up



Select Standard Configuration

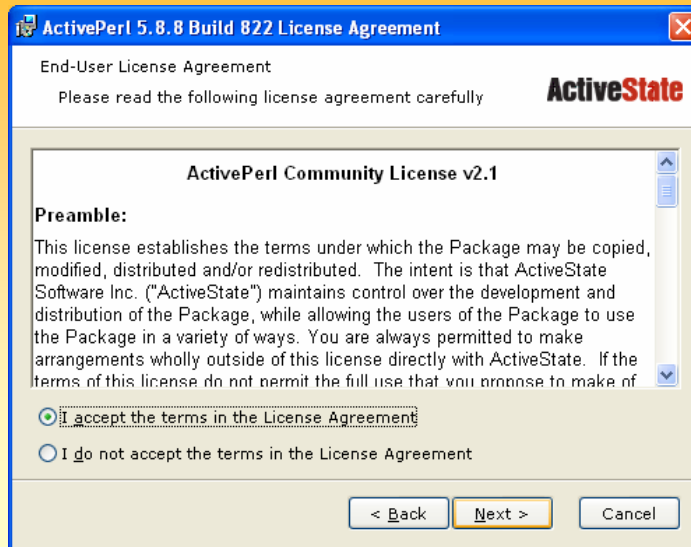


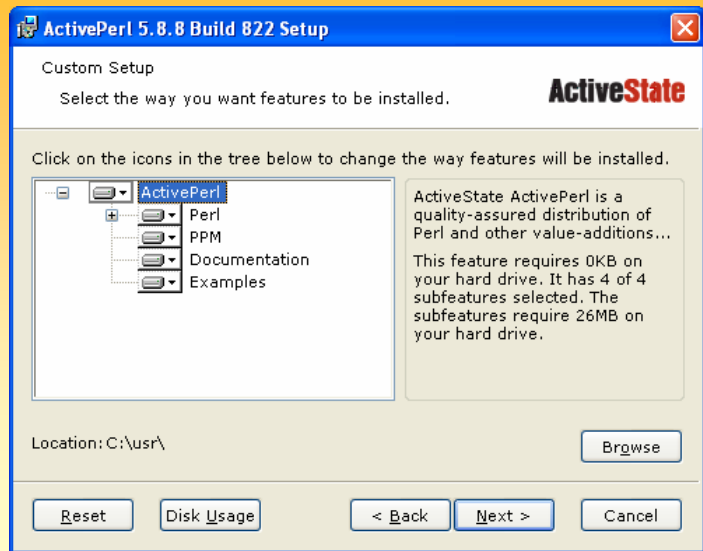
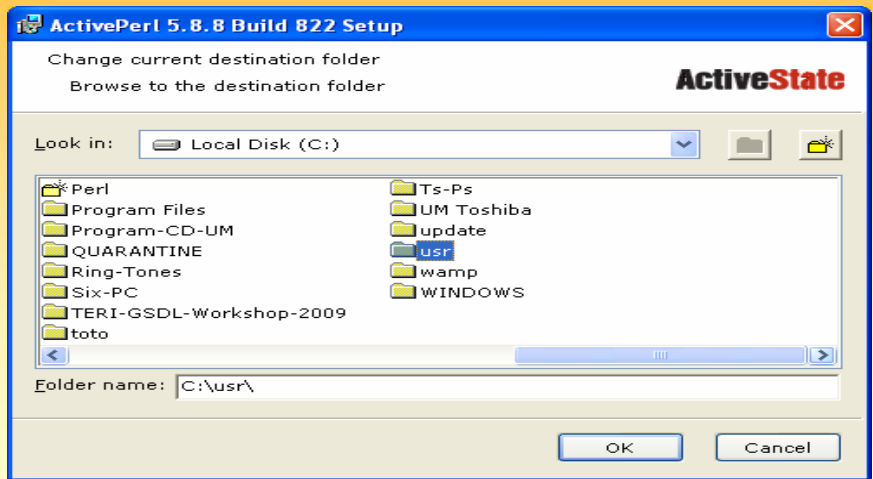


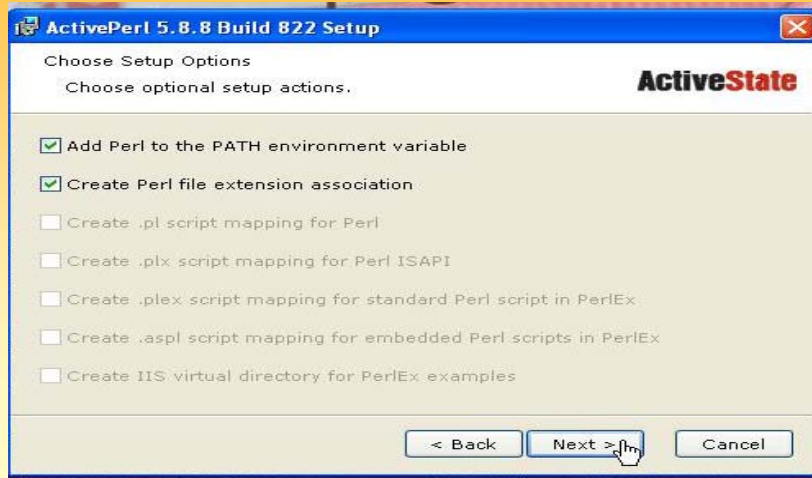


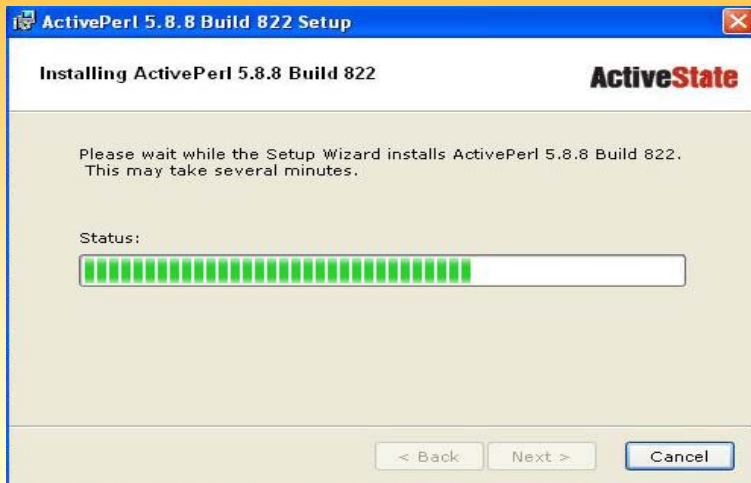
Installing Perl

Click on Active Perl Setup
Create a Folder "usr" in C:\

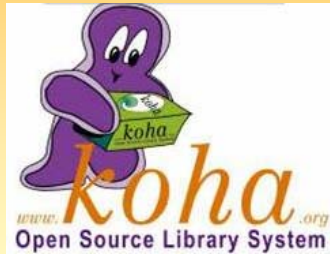




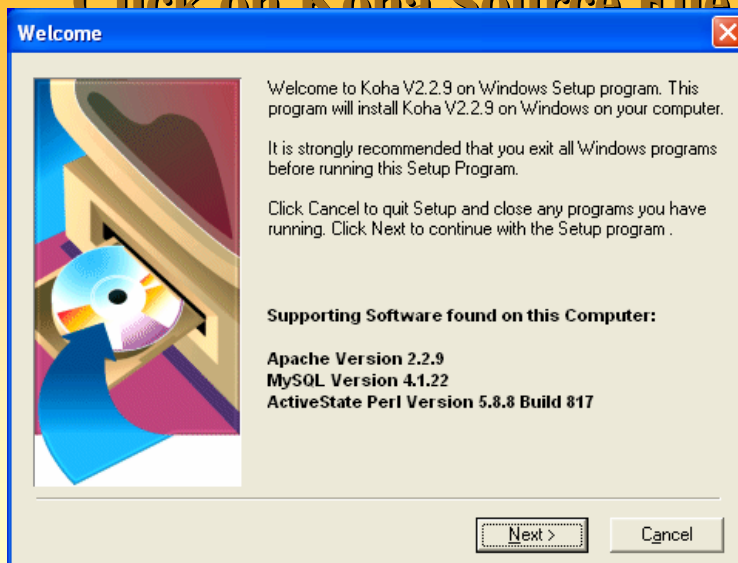


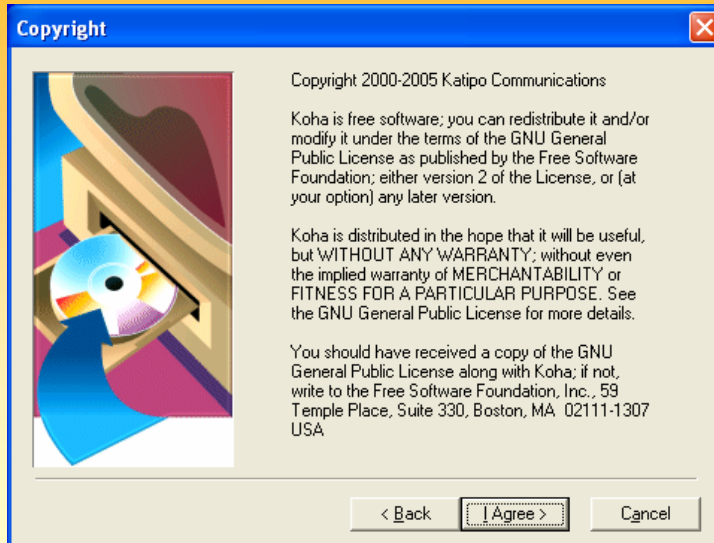


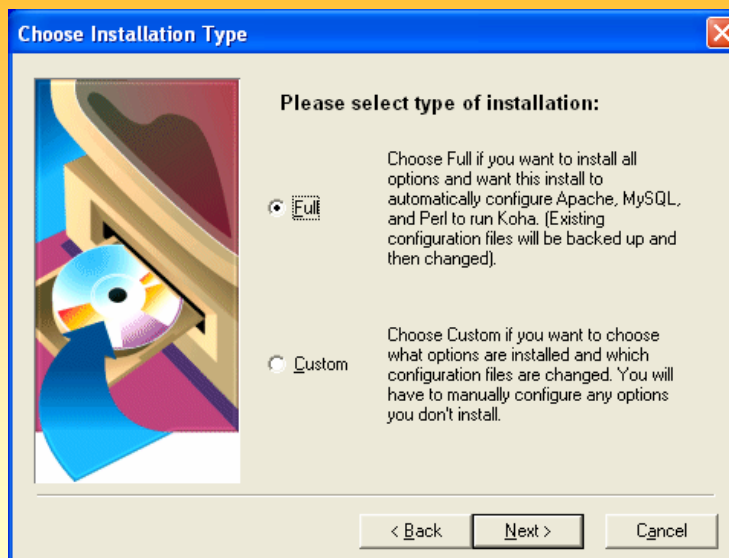
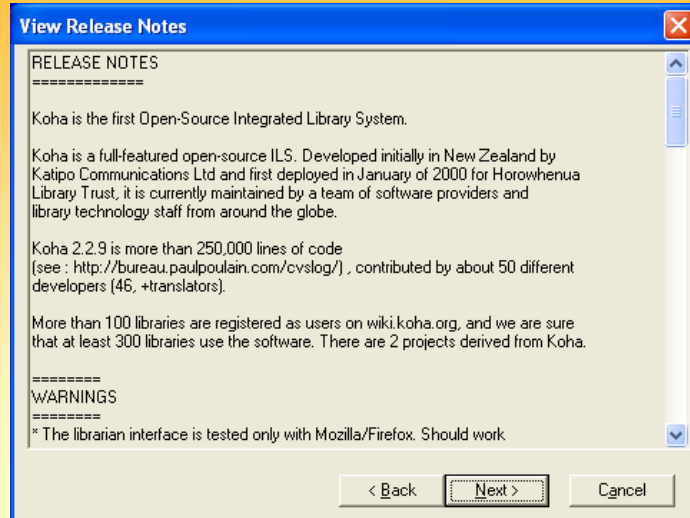
Installing KOHA

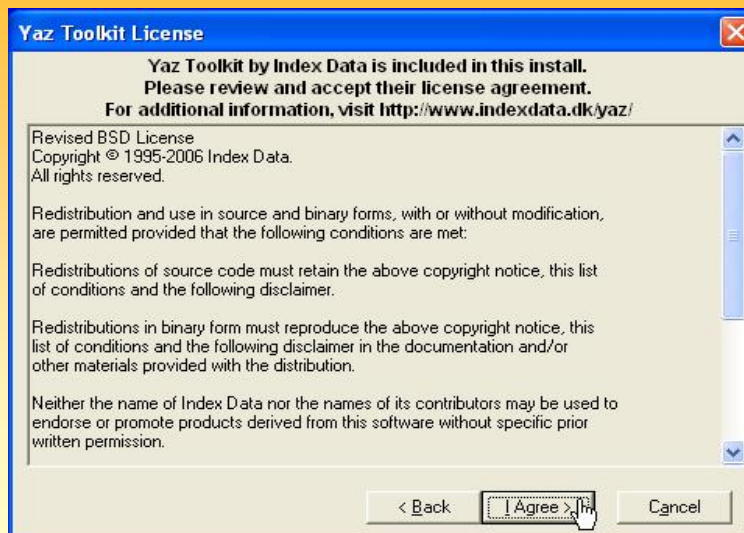
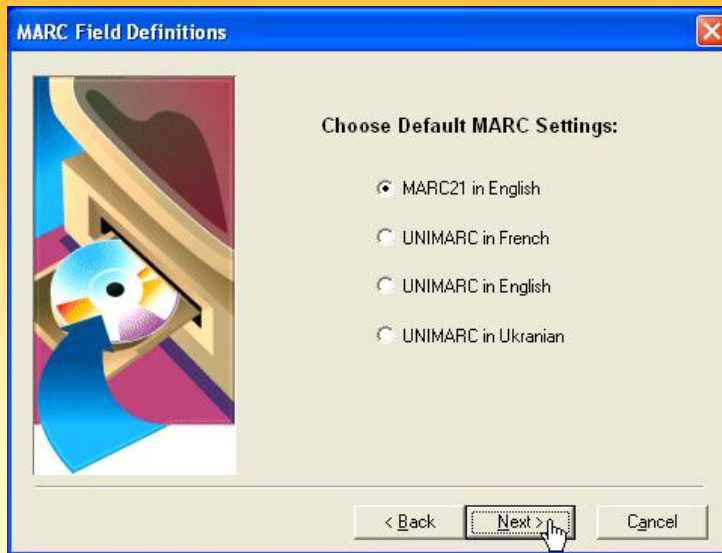


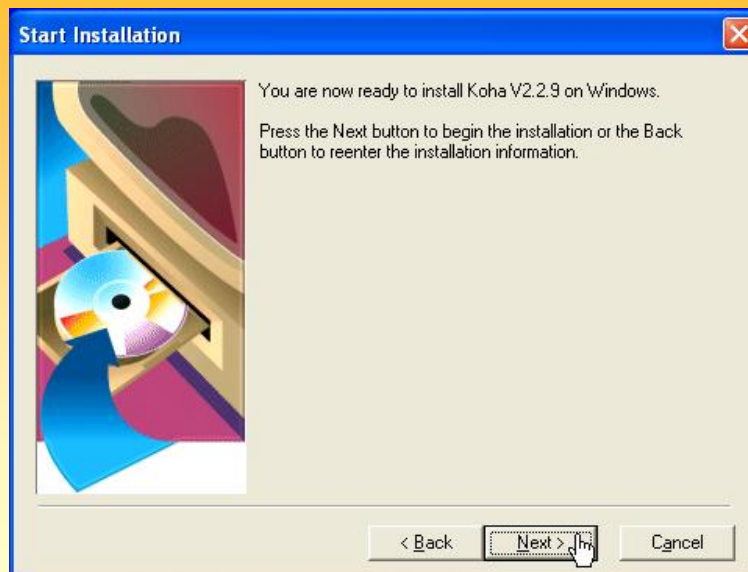
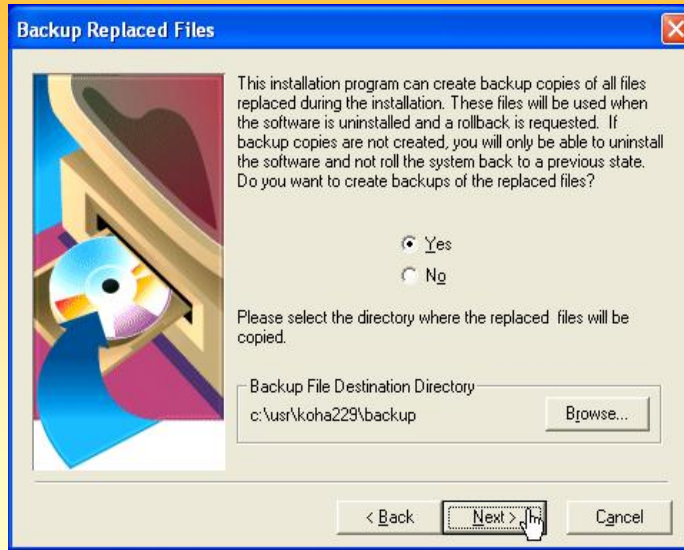
Click on Koha Source File

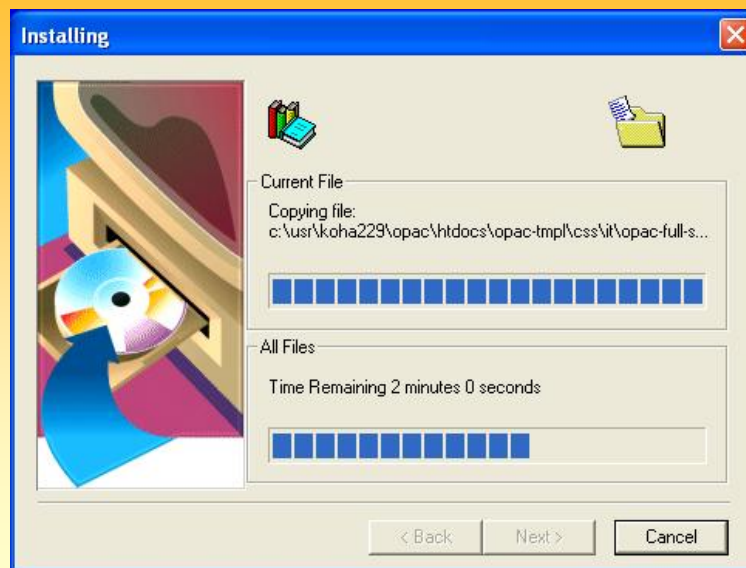
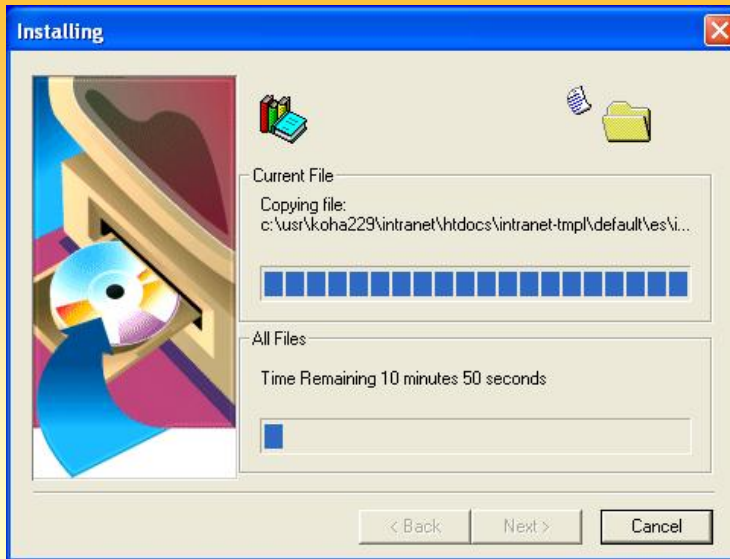






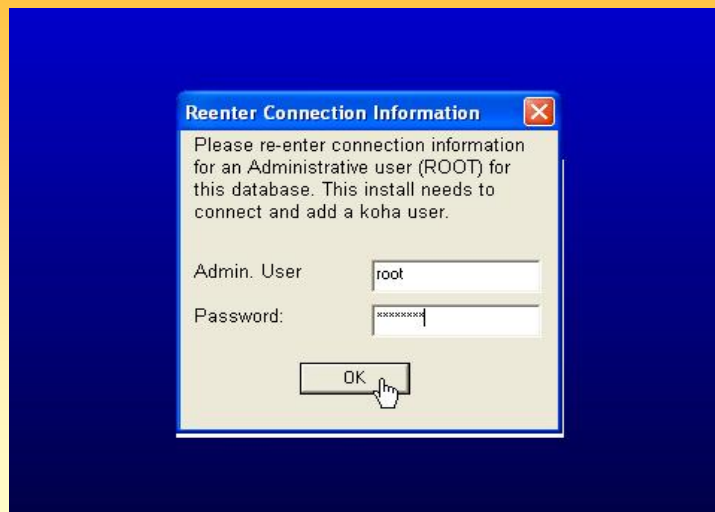
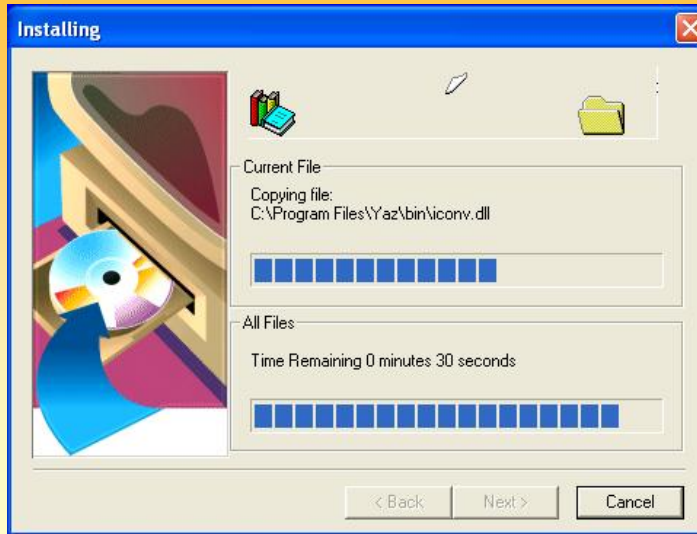






```
C:\WINDOWS\system32\cmd.exe
Syncing site PPM database with .packlists...done
Unpacking DateManip-5.44...done
Generating HTML for DateManip-5.44...done
Updating files in site area...done
    3 files installed
Unpacking DBI-1.54...done
Generating HTML for DBI-1.54...done
Updating files in site area..._
```

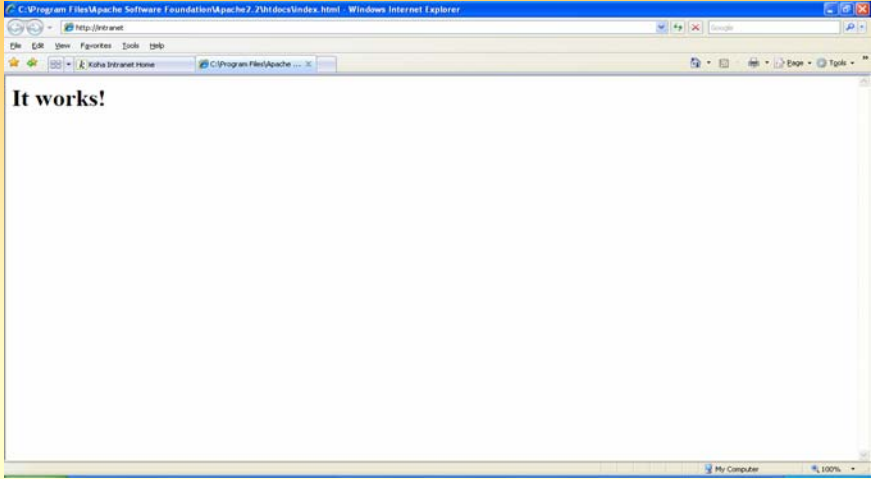
```
C:\WINDOWS\system32\cmd.exe
Generating HTML for DBI-1.54...done
Updating files in site area...done
    106 files installed
    2 files updated
Unpacking DBD-mysql-3.0002...done
Generating HTML for DBD-mysql-3.0002...done
Updating files in site area...done
    14 files installed
Unpacking HTML-Template-2.9...done
Generating HTML for HTML-Template-2.9...done
Updating files in site area...done
    2 files installed
Unpacking MARC-Record-2.0...done
Generating HTML for MARC-Record-2.0...done
Updating files in site area...done
    19 files installed
Unpacking File-Spec-0.82...done
Generating HTML for File-Spec-0.82...done
Updating files in site area...done
    14 files installed
Unpacking Digest-MD5-2.24...done
Generating HTML for Digest-MD5-2.24...done
Updating files in site area...done
    6 files installed
Unpacking Mail-Sendmail-0.79...done
Generating HTML for Mail-Sendmail-0.79...
```

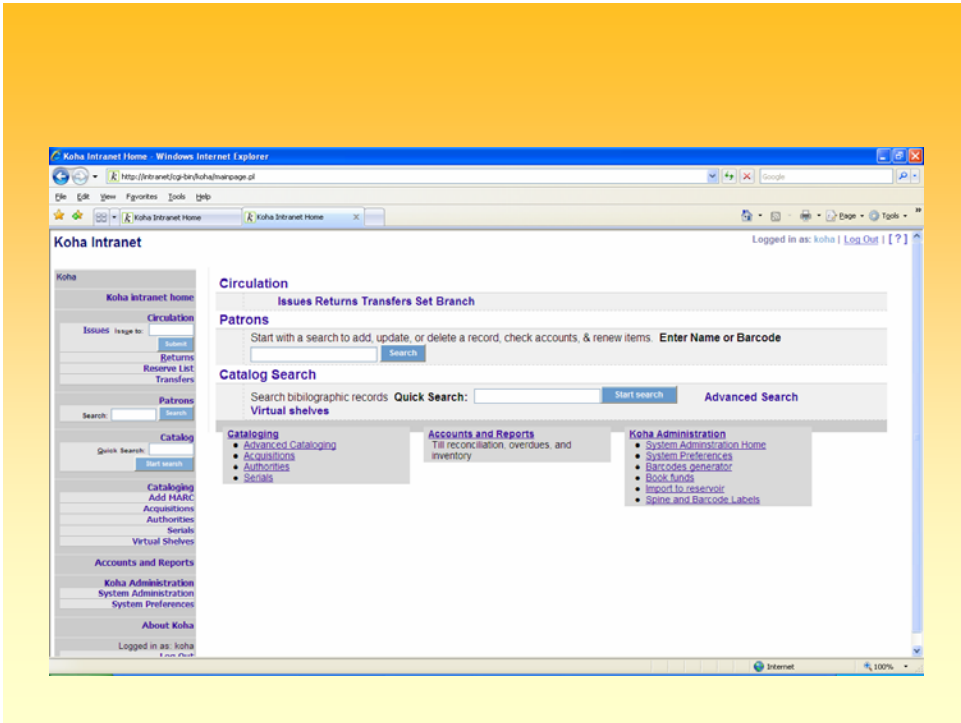
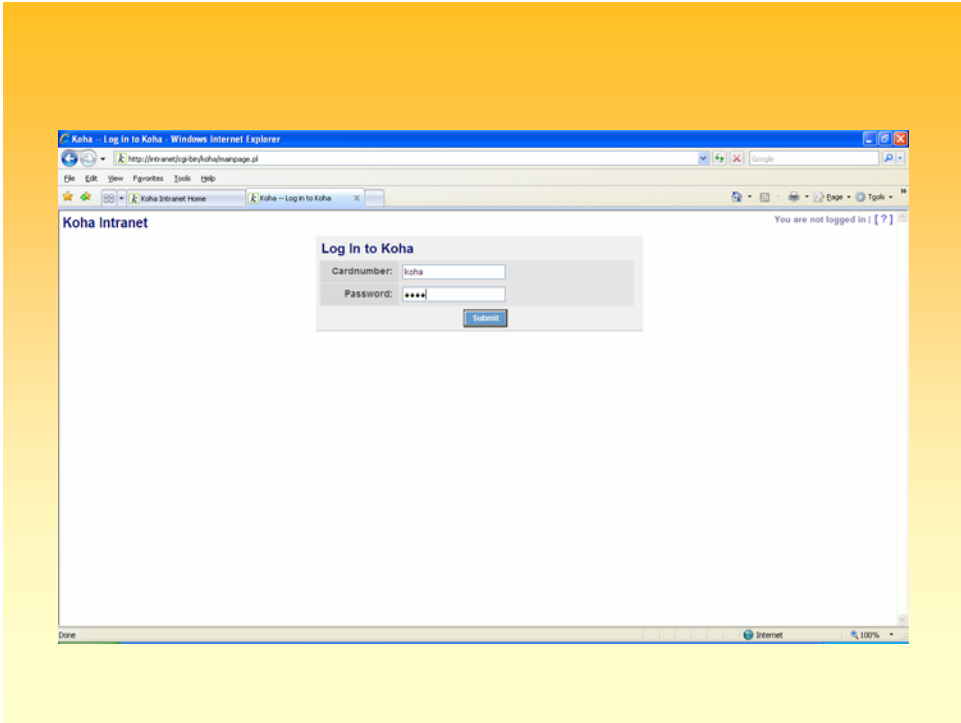




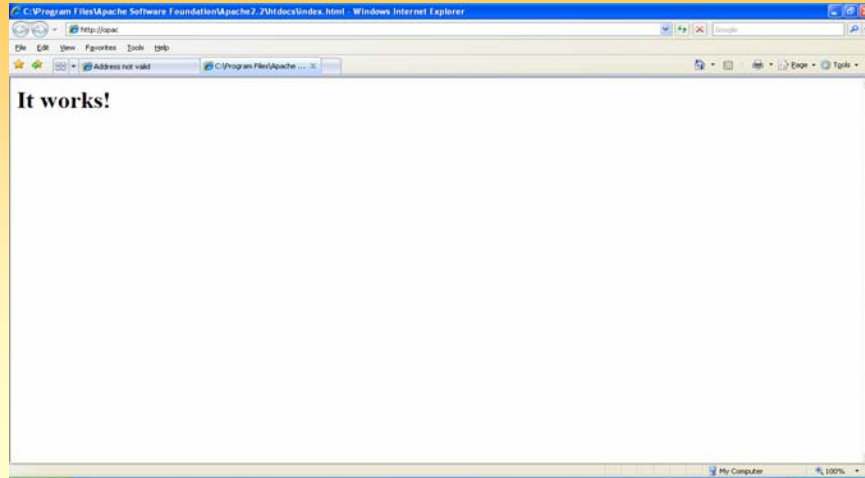
KOHA Configuration & Administration [Librarian Interface]

<http://intranet>

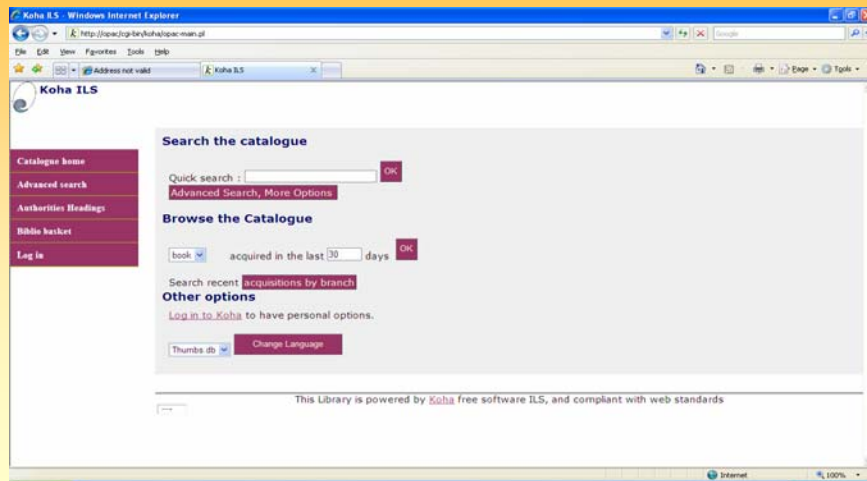




KOHA OPAC [User Interface] <http://opac>



Opac Screen



KOHA Demo

- Intranet
- Opac
- Downloading MARC Records from Library of Congress
- Importing MARC Records into Koha
- Search / Retrieval in the Opac

Koha Manuals & Must Visits

- Koha Home - <http://www.koha.org>
- A comprehensive manual on Koha 3.01.x (**Linux**) is available at:
 - <https://sites.google.com/a/liblime.com/koha-manual/>
 - For **Windows**, it is available at
 - http://www.koha.rwjr.com/Koha_on_Windows.html.
- Koha Windows version - <http://koha.rwjr.com/>
- Documentation - <http://www.kohadocs.org>
- Discussion forums - <http://koha.org/community/mailling-lists.html>
- Development Wiki - <http://wiki.koha.org/doku.php>

Greenstone: Open source Software for Building Digital Library Collections



What are digital libraries for?

- Knowledge/content management
 - Manage and access internal information assets
- Scholarly communication, education, research
 - E-journals, e-prints, e-books, data sets, e-learning
- Access to cultural collections
 - Cultural, heritage, historical & special collections, museums, biodiversity
- E-governance
 - Improved access to government policies, plans, procedures, rules and regulations
- Archiving and preservation
- Many more ...

DL Software: Alternatives

- What are your expectations?
- Develop local web-based application?
- Commercial DL solution?
- Adopt open source software?
 - Greenstone
 - Eprints
 - DSpace
 - Fedora...

Digital Library Technologies

- Interoperability
- Unified interface for heterogeneous libraries
- Metadata mapping across different libraries
- OAI-compliant data and service providers
- Multilingual digital libraries
- Scalable digital library architectures
- Publication tools
- Searching tools

DLs: Workflows and Processes

- Content selection
- Content acquisition
- Content publishing
 - Metadata preparation
 - Content loading
- Content indexing & storage
- Content access & delivery
- Preservation
- Access management
- Usage monitoring and evaluation
- Networking and interoperation
- Maintenance

DL Software: Key requirements

- Document types (book, journal article, lecture ...)
- Document formats (text, PDF, Word, PS, ...)
- Content acquisition (online and offline)
 - Metadata description, content tagging
 - Content uploading
- Indexing and retrieval
 - Structured/ full text indexing
 - Automatic metadata extraction
- Storage
 - Data compression
 - Efficient storage for metadata
 - Efficient location of metadata and documents
- Access and delivery
 - Structured search, browse, hierarchical browsing
 - CD-ROM distribution

DL Software: More requirements

- Scaling up – for large collections
- Multilingual support
- Access management and security
- Usage monitoring and reporting
- Standards compliance
 - XML, Dublin Core, Unicode
- Interoperation
 - OAI, Z39.50 compliance, MARC21...

Dublin Core Metadata Initiative (DCMI) - Windows Internet Explorer

http://dublincore.org/

File Edit View Favorites Tools Help

Search Web

Dublin Core Metadata Initiative (DCMI)

ABOUT THE INITIATIVE
DCMI NEWS

DOCUMENTS
TOOLS AND SOFTWARE

GROUPS
PROJECTS

RESOURCES
AskDCMI

Enter keyword Search

Dublin Core Metadata Initiative®
Making it easier to find information.

Overview

- [About the Initiative](#)
- [Directorate](#)
- [Board of Trustees](#)
- [Usage Board](#)
- [Advisory Board](#)
- [Architecture Forum](#)
- [By-laws](#)

Ready Reference

- [DCMI Metadata Terms](#)
- [DCMI Element Set \(ISO Standard 15836\)](#)
- [DCMI Abstract Model](#)
- [Encoding Guidelines](#)
- [Schemas](#)
- [User Guide](#)

DCMI Registry

Contact Us

- [Subscribe](#)
- [AskDCMI](#)
- [Feedback](#)

Work in Progress

- [Public Comment](#)
- [DCMI Work Structure: Communities, Task Groups](#)

Events

- [DCMI Conferences and Workshops](#)

Affiliates

- Finland**
 - [Helsinki University Library/The National Library of Finland](#)
- UK**
 - [JILA - Museums, Libraries and Archives Council](#)
 - [JISC - The Joint Information Systems Committee](#)

International Conference on Dublin Core and Metadata Applications
22-26 September 2008

DC-2008 Call for Papers published

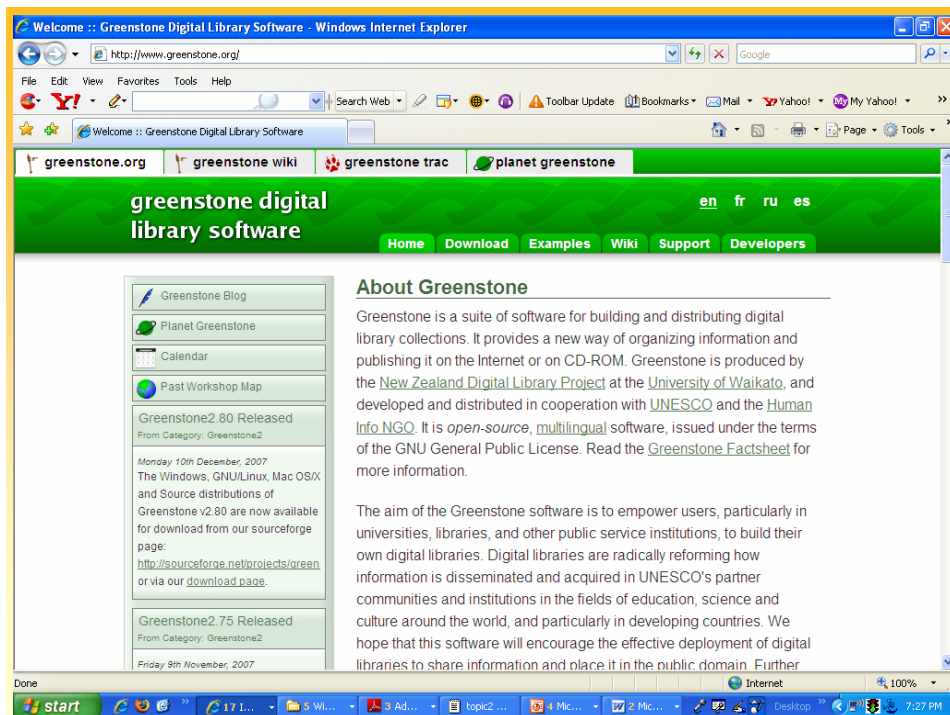
2007-12-03, The [Call for Papers](#) for DC-2008, to be held 22-26 September 2008 in Berlin, is now available from the [conference Web site](#). The theme of the conference is "Metadata for Semantic and Social Applications". Papers, reports, and poster submissions addressing the conference theme as well as a wide range of metadata topics are welcome. Please note that the submission deadline for papers, reports and posters is **30 March 2008**.

Major update of DCMI Metadata Terms documentation

start 171... 5 Wi... 4 Ad... topic2... 4 Mic... 2 Mic... Desktop 7:18 PM

Complete DL Systems

- Greenstone
- DSpace
- Eprints



What is the Greenstone software?

- ❖ Software suite for building, maintaining, and distributing digital library collections
- ❖ Comprehensive, open-source
- ❖ Developed by New Zealand Digital Library Project at the University of Waikato
- ❖ Distribution and promotion partners:
 - ❖ UNESCO
 - ❖ Human Info NGO, Belgium
 - ❖ NCSI, Bangalore; UCT, Cape Town; Dakar, Senegal; Almaty, Kazakhstan; ...
 - ❖ You!



Greenstone Features

- Supports creation and management of collections by administrator(s)
- Web interface for search and retrieval
 - Customizable metadata
 - Supports full text search of content
- Extensive document filters
 - Word, Excel, PowerPoint, PDF, ...
 - Can extract metadata from documents
- Many ways to build a collection, including:
 - Local files
 - Retrieve web sites
 - Retrieve objects via OAI-PMH

Greenstone Features...

- Open Source Philosophy
- Interfacing & Content Delivery via Web
- Multi S/W Platform
- Multi Lingual Support
- Multi Formats
- Structured Metadata in XML using DC
- Metadata Extraction
- Searching & Browsing
- Plug-ins for Documents
- Full-text mirroring
- Text Level Penetration
- Data Compression
- Password protection
- Administrative Functions
- Concurrent & Dynamic Content Development
- Uniform Presentation
- Publishing on CDROMs
- International Presence

Greenstone Features contd...

- Easy Installation
- Easy Maintenance
- Content Development (3 alternate ways)
- Predominantly GLI now - since (V. 2.41)
- Hierarchy Structure
- Interface Customization
 - Front Page Design, Header for the Digital Library, Collection Icon, Cover Images
- Collection Configuration (Collect.cfg) File
- Scalability, Flexibility
- Interoperability (Crosswalk), OAI Compliance
- Lifeline : Listserv / E-Group / Archives

The power of open source: Greenstone uses ...

- ❖ Ghostscript Interpreter for Adobe Postscript documents (Postscript plugin)
- ❖ Kea Keyphrase extraction program (to generate metadata)
- ❖ pdftohtml Converter for PDF documents (PDF plugin)
- ❖ rtfhtml Converter for RTF documents (RTF plugin)
- ❖ TextCat Detects languages and document encodings
- ❖ wvWare Converter for Word documents (Word plugin)
- ❖ Xlhtml Converter for Excel/Powerpoint documents (plugins)
- ❖ XML::Parser Parses XML documents, used to read and write Greenstone's internal XML document format

and ...

- ❖ MG Creates compressed full-text indexes and performs searches
 - ❖ GDBM Database used for metadata etc
 - ❖ wget Downloading pages from the Web when creating collections
 - ❖ YAZ Client and server implementation of Z39.50
 - ❖ Stemmer English language stemmer
-
- ❖ GCC C/C++ compiler
 - ❖ CVS Version control system
 - ❖ Perl Used for plugins etc
 - ❖ Apache Web server used by many Greenstone installations
 - ❖ OAI-PMH OAI Performance

Example Greenstone collections

- Rapid growth in use
- International – Many Countries...China, Germany, India, UK, USA, Russia, Malaysia, Singapore... – Almost all countries/Continents
- Increasing activity on Greenstone mailing list
- Promotion by UNESCO – “deployment of DL’s for sharing public domain information”
- Wide variety of DL collections have been developed in several languages
 - historical, educational, cultural, and research

Greenstone Technology

- Runs on Windows (back to 3.1), Linux, Mac OS X, Unix
- Written in C++, Perl, and Java
- Uses MG/MG++ search engine
- Several different Web and Java/Swing user interfaces for various functions
- Web interface for user access

Greenstone on Windows

Version 2.81rc

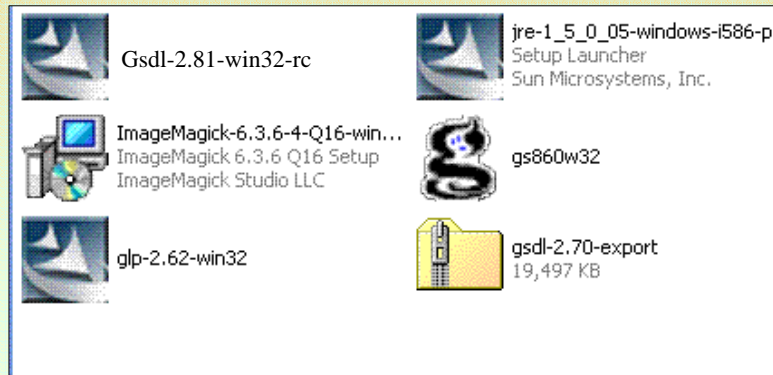


Greenstone & Associated Softwares

- **Greenstone 2.81** (<http://www.greenstone.org>)
- **Java Runtime Environment (JRE)**
(<http://java.sun.com>)
- **ImageMagick** (<http://www.imagemagick.org>)
- **Ghostscript** (<http://www.cs.wis.edu/~ghost/>)
- **Module for CD-ROM Publishing**
(<http://www.greenstone.org>)
- **Additional Language Pack** (<http://www.greenstone.org>)

Installing Greenstone

Softwares/Files Required



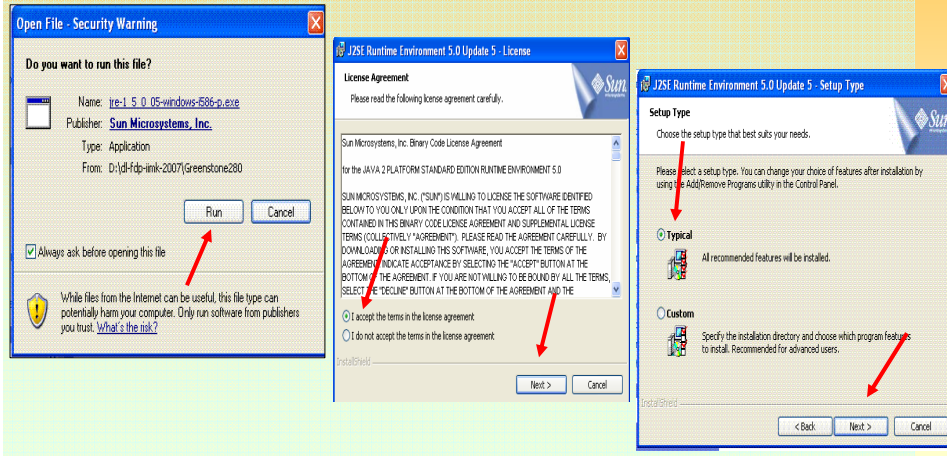
Sequence of Installation

1. **Java Runtime Environment (JRE)**
2. **ImageMagick**
3. **Ghostscript**
4. **Greenstone now comes with “ImageMagick” and “Ghostscript” bundled and hence they don’t need to be installed**
5. **Greenstone 2.81**
6. **Module for CD-ROM Publishing**
7. **Additional Language Pack**

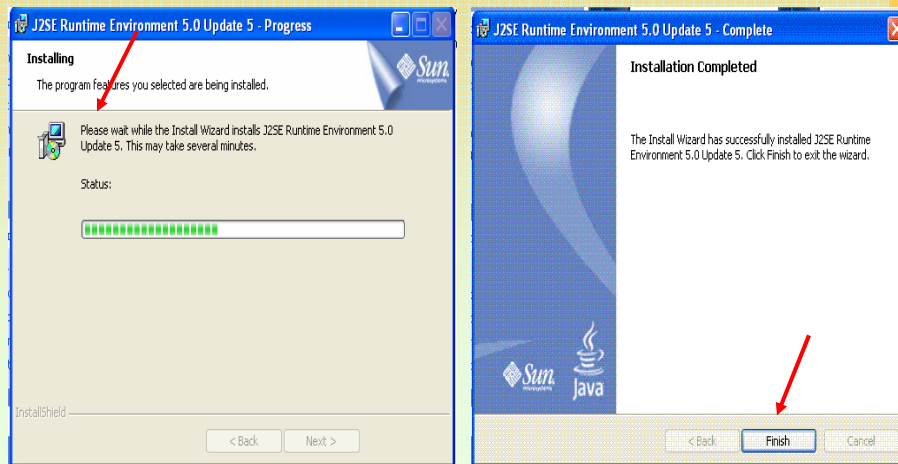
Installing...Java Runtime Environment (JRE)

Step 1. Check and Remove any Java Presence

Step 2. Locate the jre-1_5_0_05-windows-i586-p and Click to Install



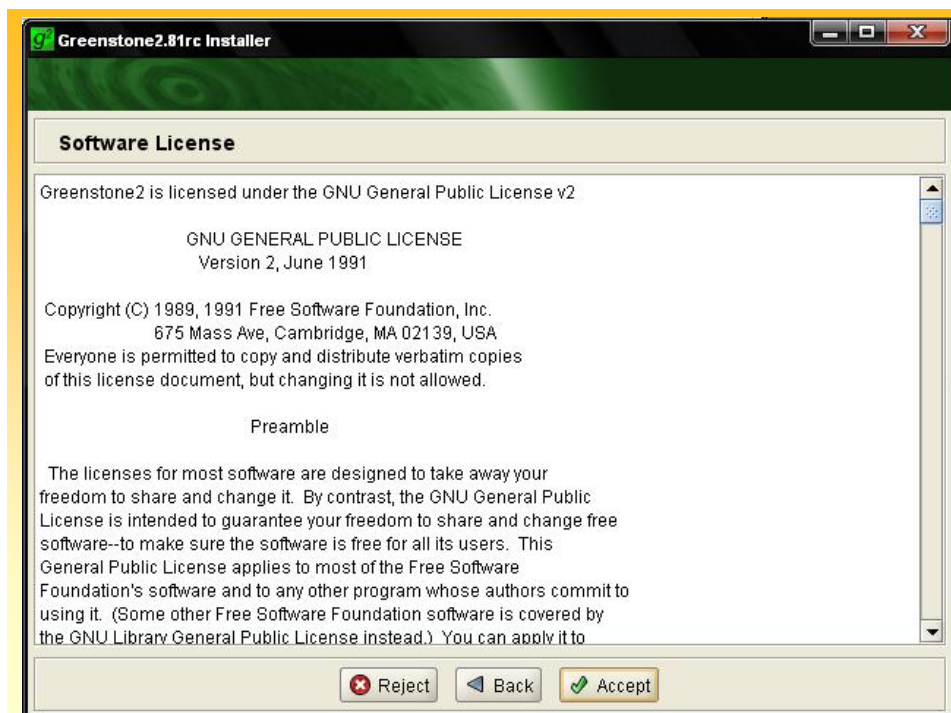
Installing...Java Runtime Environment (JRE)

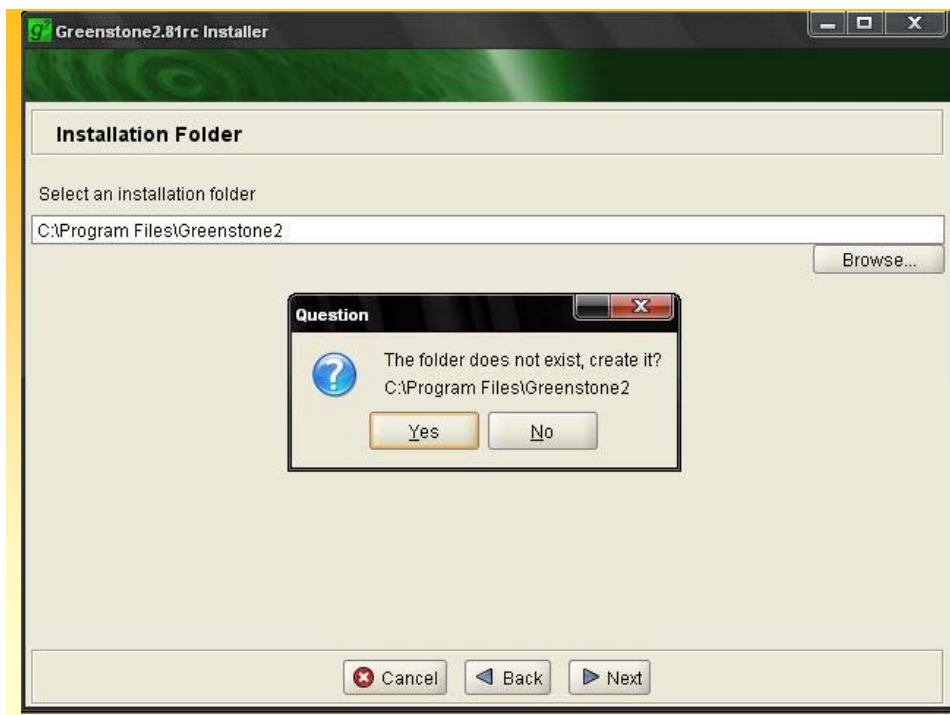
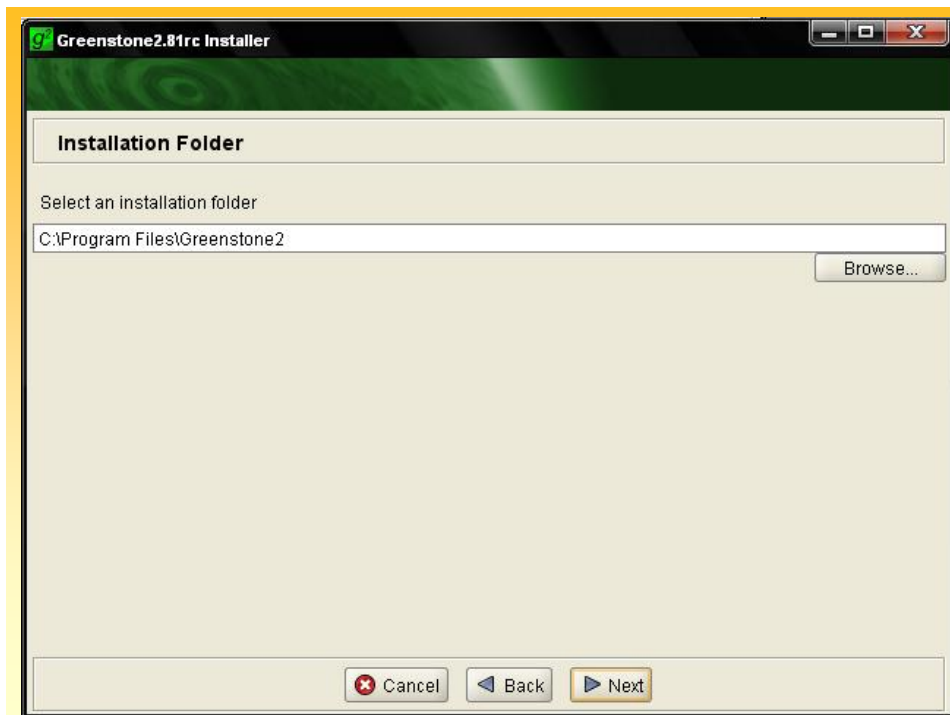


Greenstone Installation

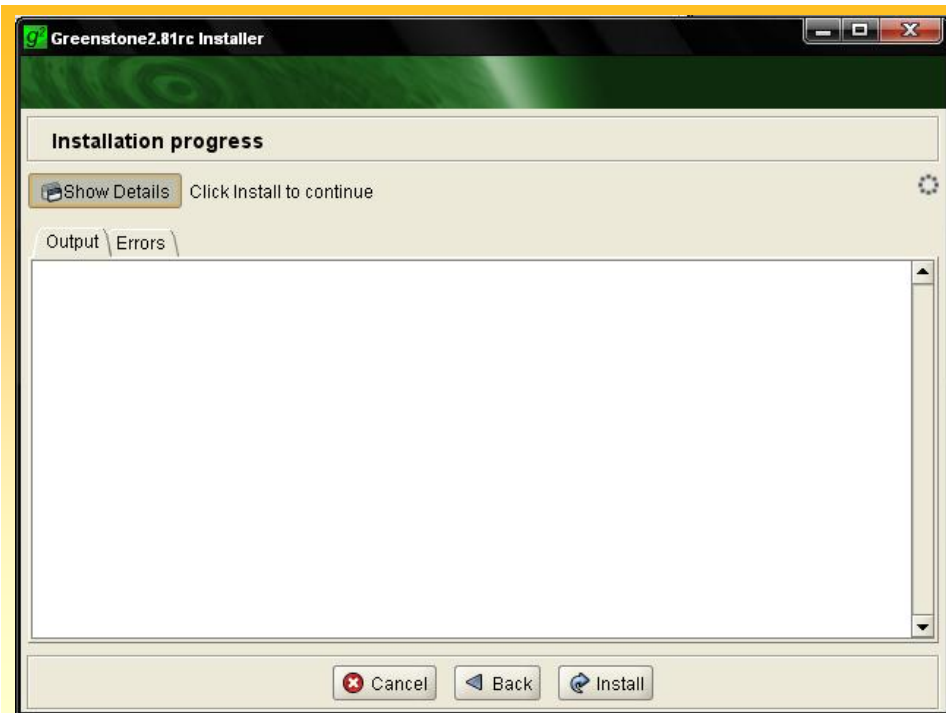
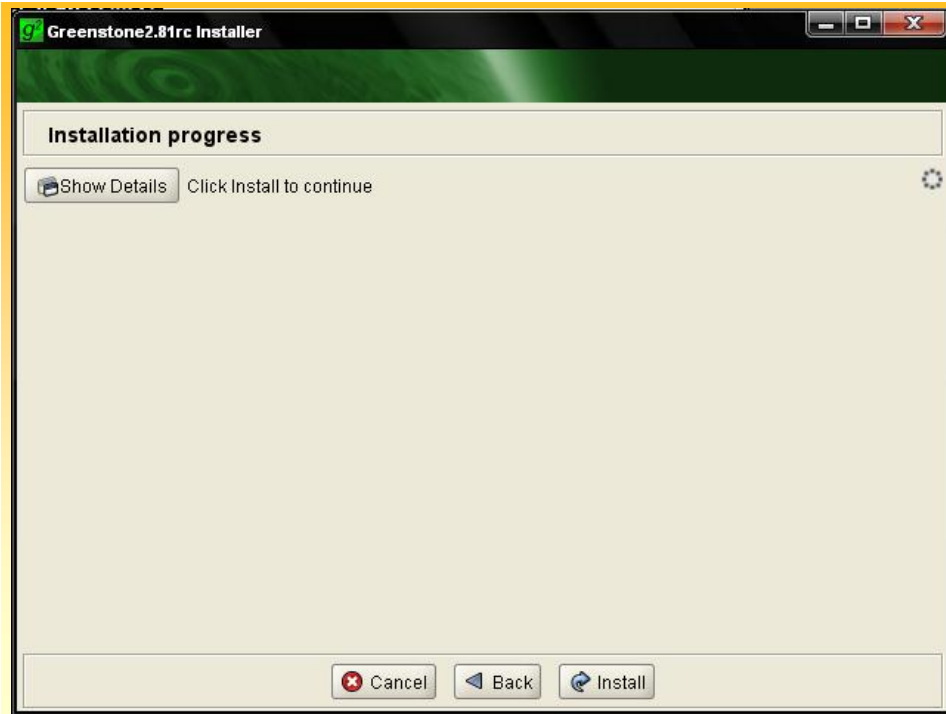
Version 2.81rc

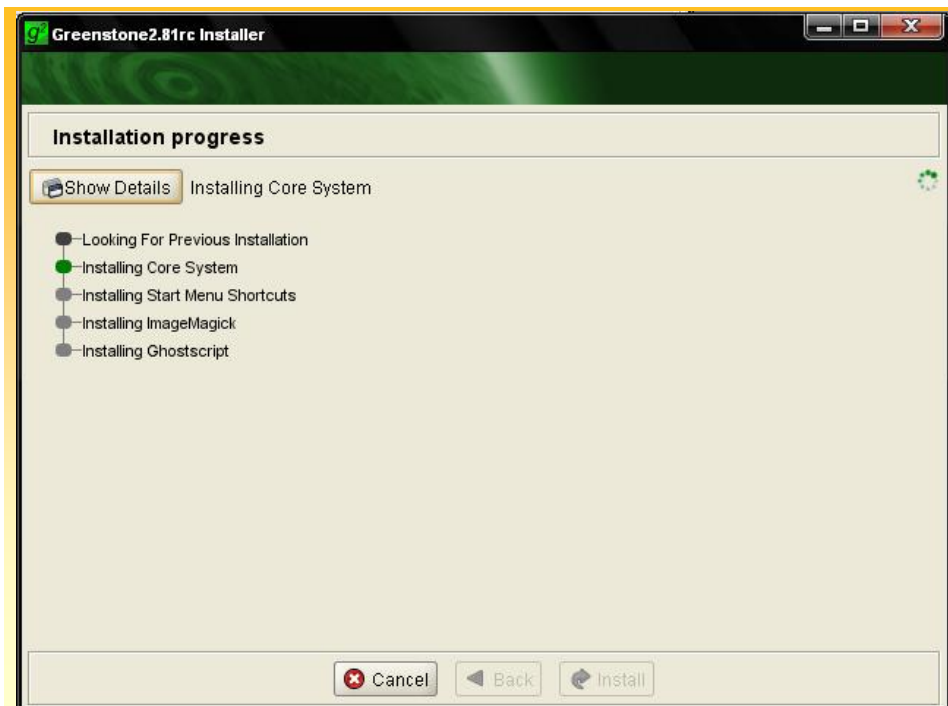
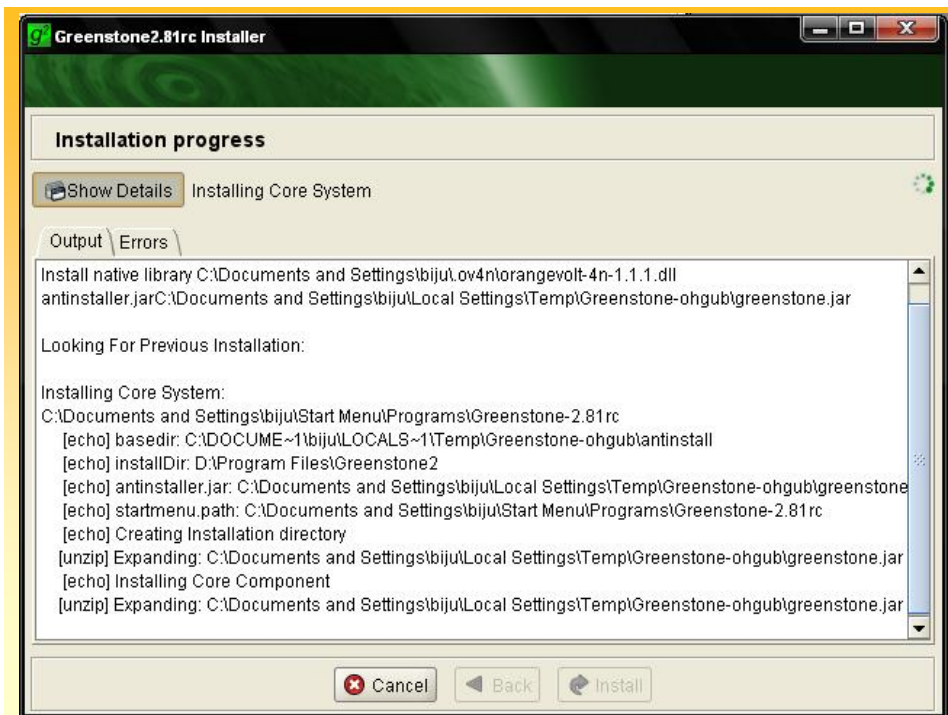


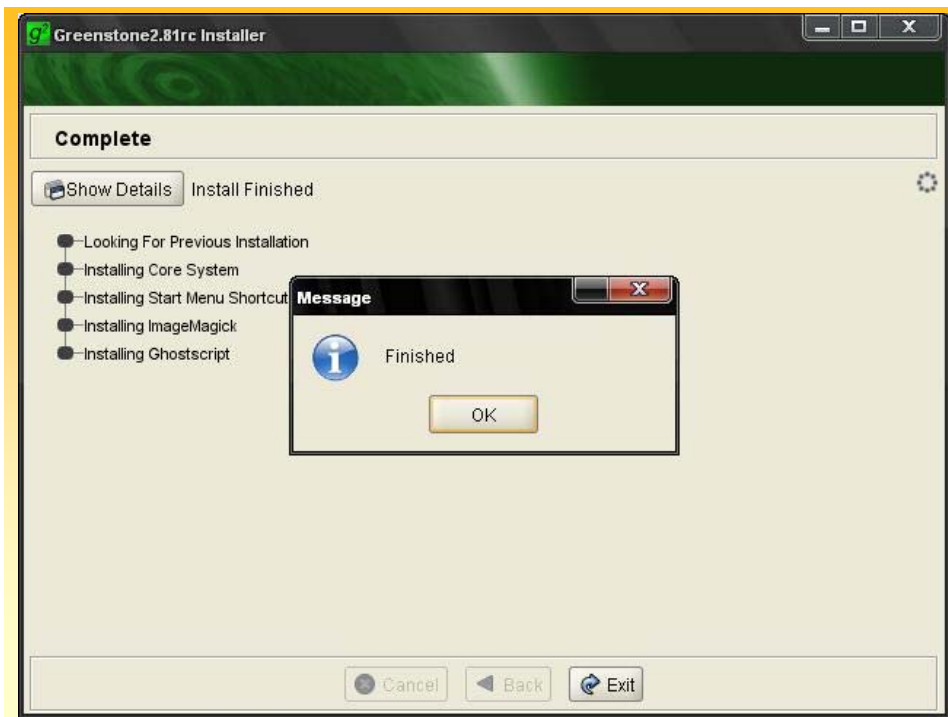








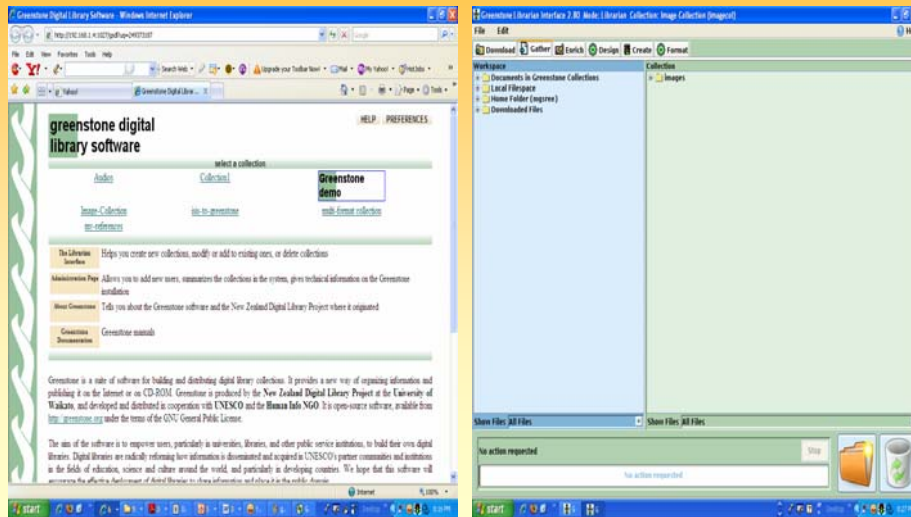




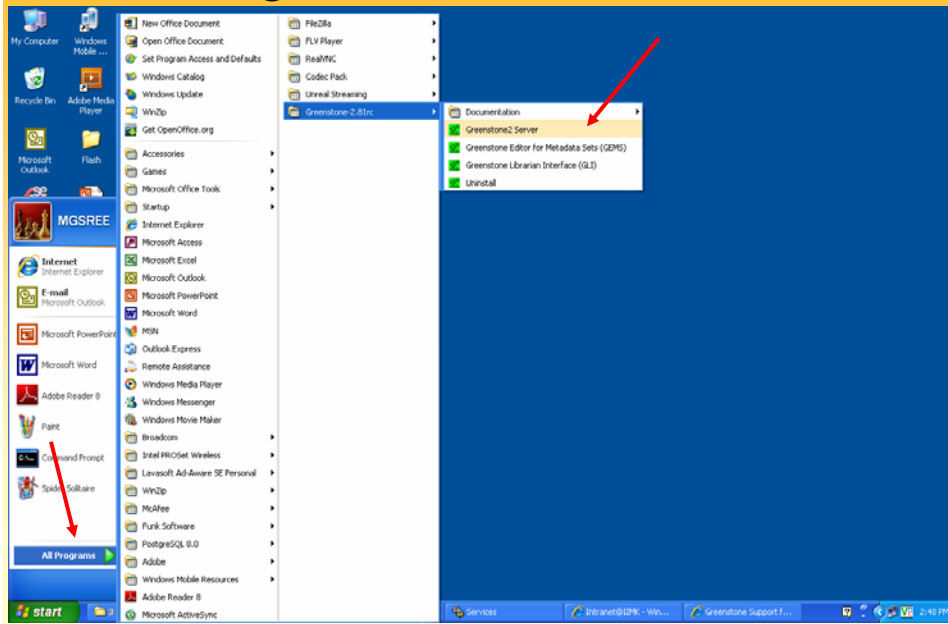
Greenstone's Interfaces

Digital Library (User + Librarian)

Librarian Interface (GLI)



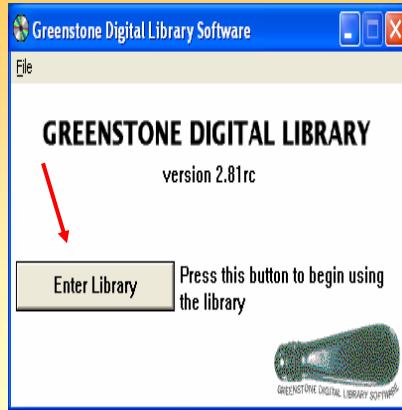
Invoking Greenstone on Browser



Opening Greenstone on Browser

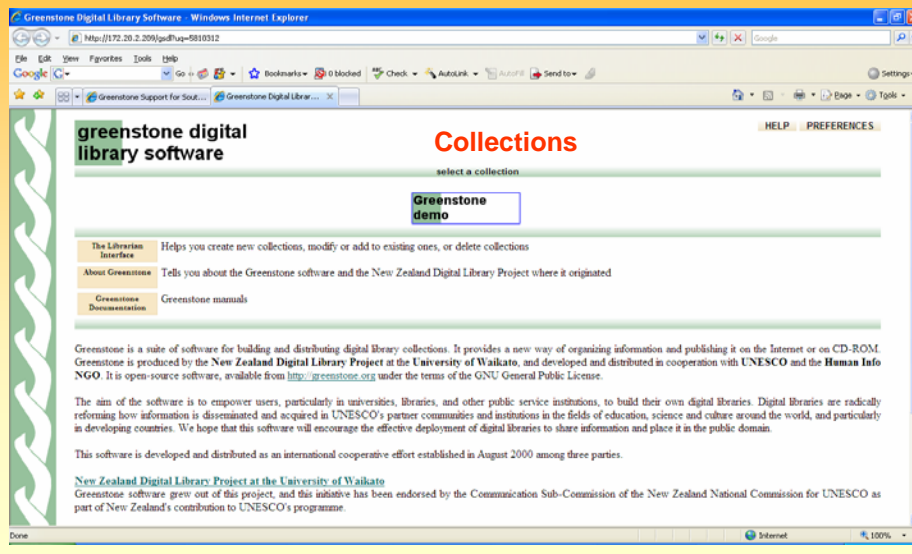
Digital Library Server

Greenstone Digital Library

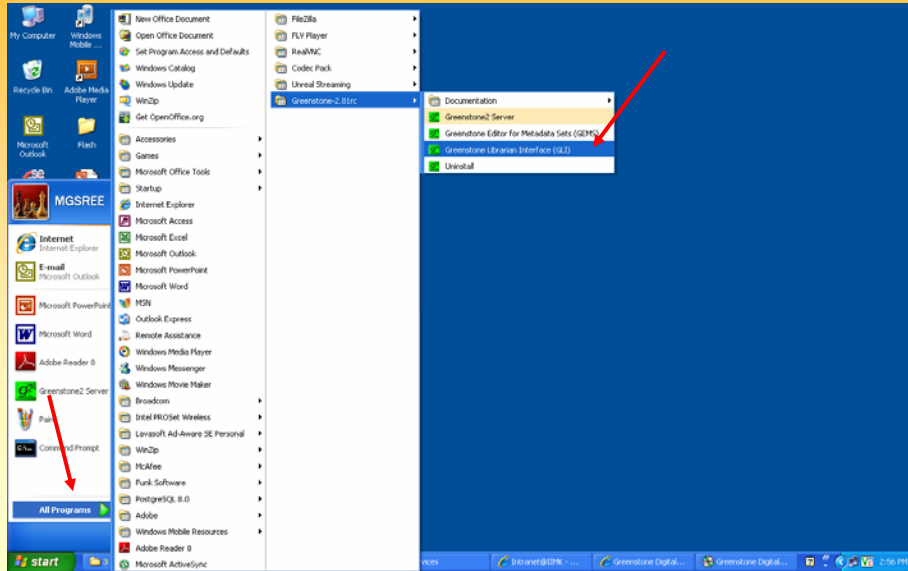


Opening Greenstone on Browser

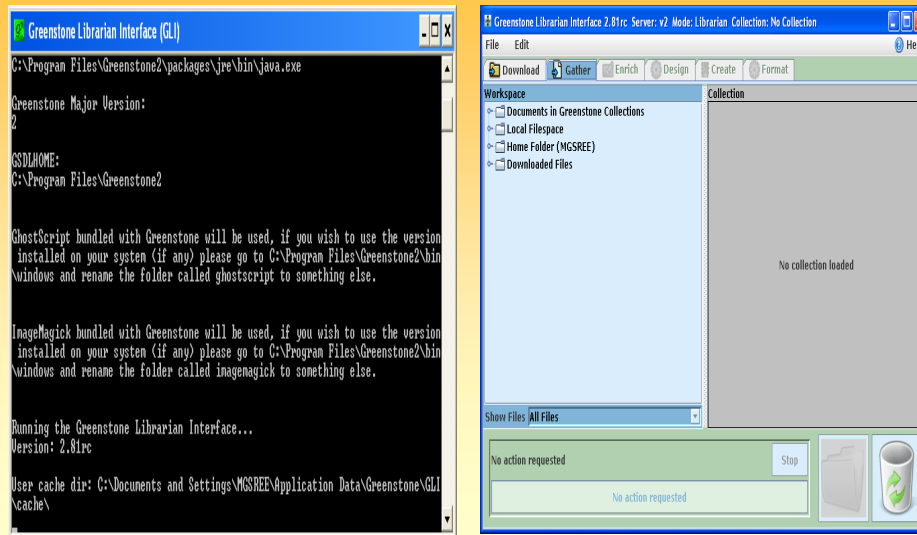
Greenstone Digital Library



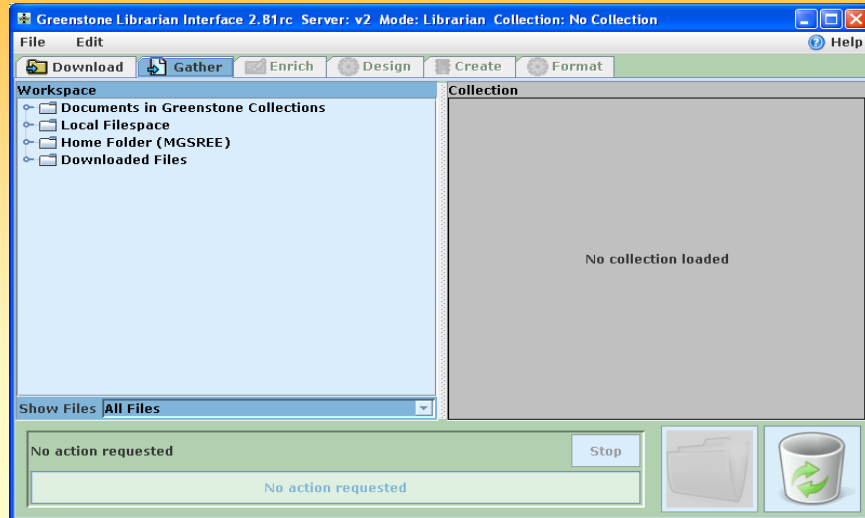
Opening the GLI



Opening the GLI



GLI



GLI Functions

- Establish new collection (or work on old)
- Select files to include in collection (Gather)
- Enrich files with metadata (Enrich)
- Select Plugins, Indexes, Classifiers (Design)
- Build Collection (Create)
- Format and Control Display (Format)
- Customize Appearance
- Preview Collection

Collection Building...

- Greenstone used to have three modes of collection building, viz., **Command Line**, **Web Interface** and **the GLI** (Greenstone Librarian Interface)
- Progressing with version 2.4x., the GLI got strengthened as well as popularized
- Web Interface mode has been withdrawn temporarily.
- The GLI based collection building is quite easy and simple a method.
- Collection developers can activate the GLI software and use the **'Gather'**, **'Enrich'**, **'Design'**, **'Format'** and **'Create'** panel for making collection

Customization

- Greenstone is specifically designed to be highly extensible and customizable.
- New document and metadata formats are accommodated by writing "plugins" (in Perl).
- Analogously, new metadata browsing structures can be implemented by writing "classifiers."
- The user interface look-and-feel can be altered using "macros" written in a simple macro language.
- A Corba protocol allows agents (e.g. in Java) to use all the facilities associated with document collections.
- Finally, the source code, in C++ and Perl, is available and accessible for modification

Customizing with macros

- Let you customize presentation
- Present pages in different languages
- Print variables into the page text
(e.g. number of search hits)
- Macro files
 - stored in greenstone2/macros folder
 - each file defines one or more “packages”
(A “package” is a group of macros)
 - loaded on startup
(note difference between Local and Web Library)
 - listed in etc/main.cfg
- Collection-specific macros
 - Stored in greenstone2/collect/mycol/macros/extra.dm
 - Or include argument [c=collectionname] for each macro

The screenshot shows a Microsoft Internet Explorer browser window displaying a digital library page. The page title is "Ecology and The Politics of Survival: Conflicts Over Natural Resources in India - Microsoft Internet Explorer". The browser's address bar shows a long URL. The page content includes a search bar, navigation links (HOME, HELP, PREFERENCES, filenames), and a table of contents for the book "Ecology and The Politics of Survival" by Vandana Shiva. The table of contents lists sections such as Metadata, Preface, Introduction, Part One: Forest Conflicts (Chapters 1-5), and Part Two: Water Conflicts (Chapters 6-8). A green box highlights the "Hierarchy Structure" section of the table of contents.

EXPAND TEXT	CONTRACT CONTENTS
DETACH	NO HIGH-LIGHTING

Hierarchy Structure

- Ecology and The Politics of Survival: Conflicts Over Natural Resources in India
- source ref: [ebookecopof.html](#)
- Metadata
- Preface
- Introduction
- Part One: Forest Conflicts
 - Chapter 1: Forest ecology and forest conflicts
 - Chapter 2: The survival economy and forest conflicts
 - Chapter 3: The chipko movement
 - Chapter 4: Afforestation programmes and land use conflicts
 - Chapter 5: Wasteland development and conflict over commons
- Part Two: Water Conflicts
 - Chapter 6: Conflicts over river waters
 - Chapter 7: Large dams and conflicts in the Krishna Basin
 - Chapter 8: Water scarcity and people's

Collection configuration

- Collection configuration file determines content conversion, extraction and building of indexes and browsing structures
 - indexes, classifiers, plugins
- Presentation of search/browse results and collection interface is determined by “format” strings and “macros”

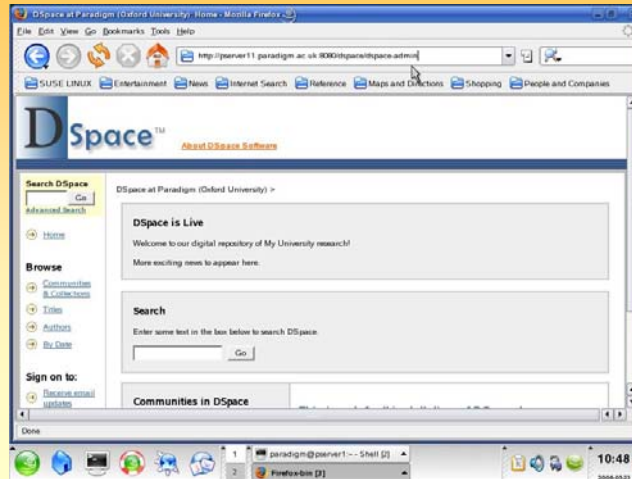




Greenstone Demonstration

- Examples at www.greenstone.org
- Greenstone Support for South Asia
 - greenstonesupport.iimk.ac.in

DSpace

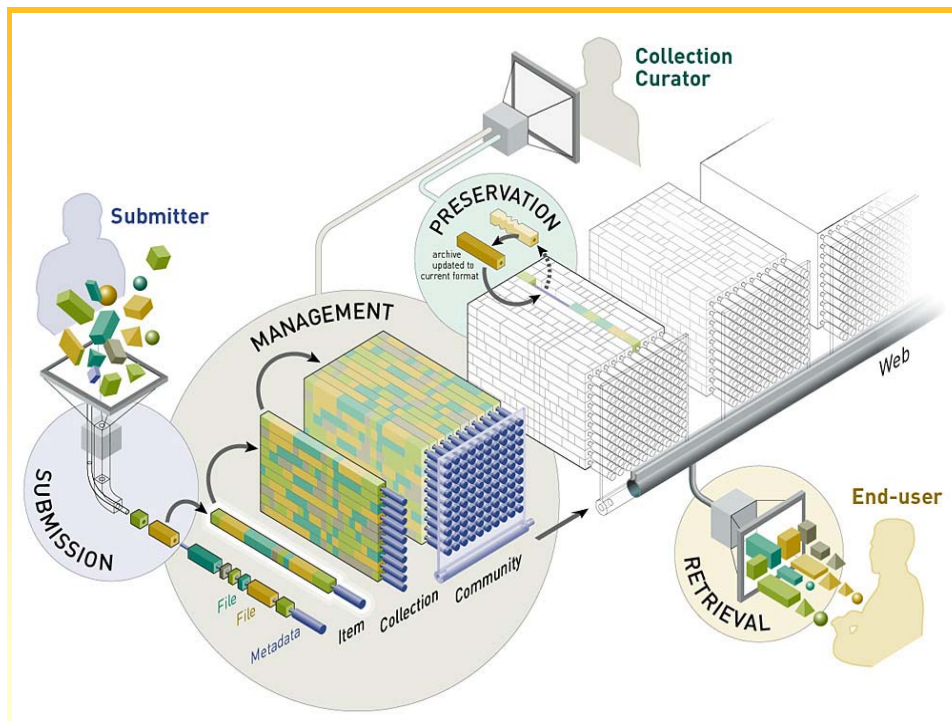


DSpace

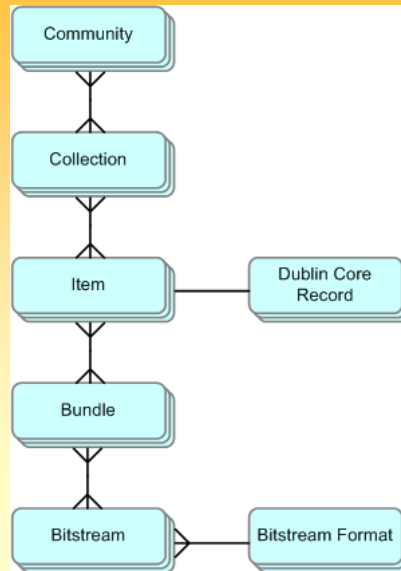
- “DSpace is a groundbreaking digital institutional repository that captures, stores, indexes, preserves, and redistributes the intellectual output of a university’s research faculty in digital formats.”
- Developed jointly by MIT Libraries and Hewlett-Packard
- Licensed under BSD distribution license
- www.dspace.org

DSpace

- Supports submission of, management of, and access to digital content
 - Formats: text, images, audio, video
- Organized based on organizational needs of a large university
 - *Communities and collections*



DSpace Data Model



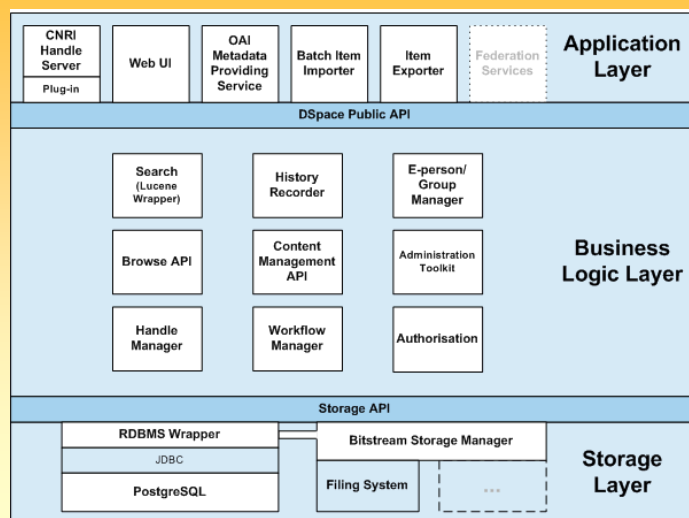
DSpace Features

- **Digital preservation**
 - Persistent IDs, support levels for different file formats
- **Access control**
- **Versioning**
- **Search and retrieval**
 - Based on qualified Dublin Core metadata
- **OAI-PMH data provider**
 - To support metadata harvesters

DSpace Technology

- OS: Unix or Linux
- Written in Java
- PostgreSQL relational database
- Provides complete Web user interface, but Java APIs available

DSpace Architecture



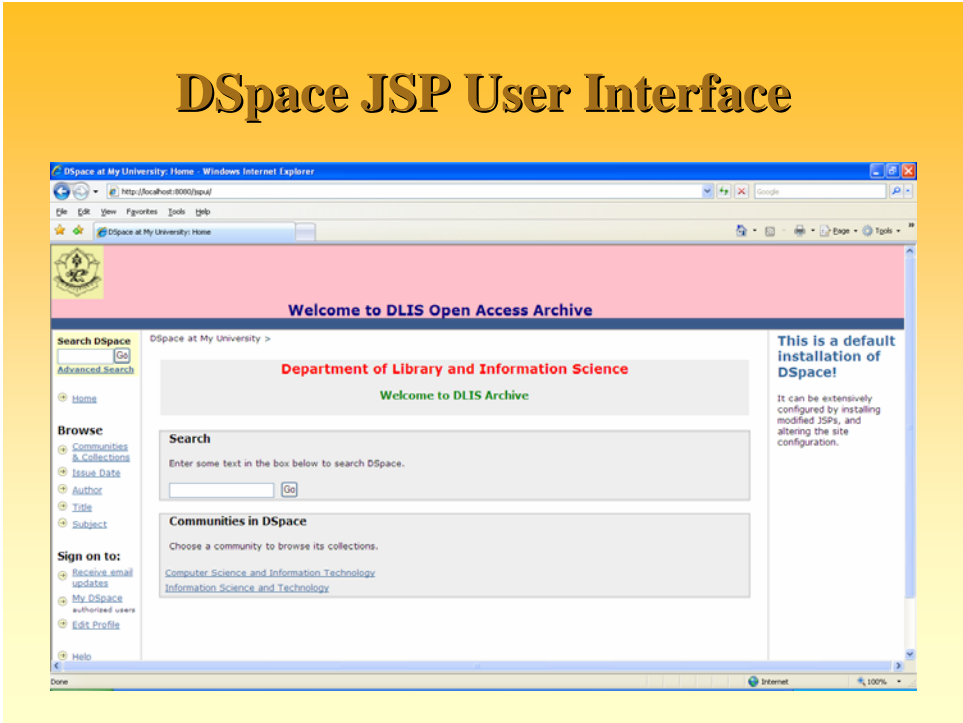
DSpace Software / Utilities

1. **Java SDK 1.4.2**
http://java.sun.com/javase/downloads/index_jdk5.jsp
2. **Apache Maven 2.0.54**
<http://maven.apache.org/download.html>
3. **Tomcat 5.0.28**
<http://tomcat.apache.org/download-55.cgi>
4. **Apache Ant 1.6.5**
<http://ant.apache.org/bindownload.cgi>
5. **PostgreSQL 8.0.2**
<http://mirror.tomato.it/ftp/pub/PostgreSQL/binary/v8.0.2/win32/>
6. **DSpace 1.5x / 2.x**
<http://downloads.sourceforge.net/dspace/dspace-1.5.0-release.zip>

Invoking DSpace

- Start the Tomcat Service
- Start PostgreSQL Service

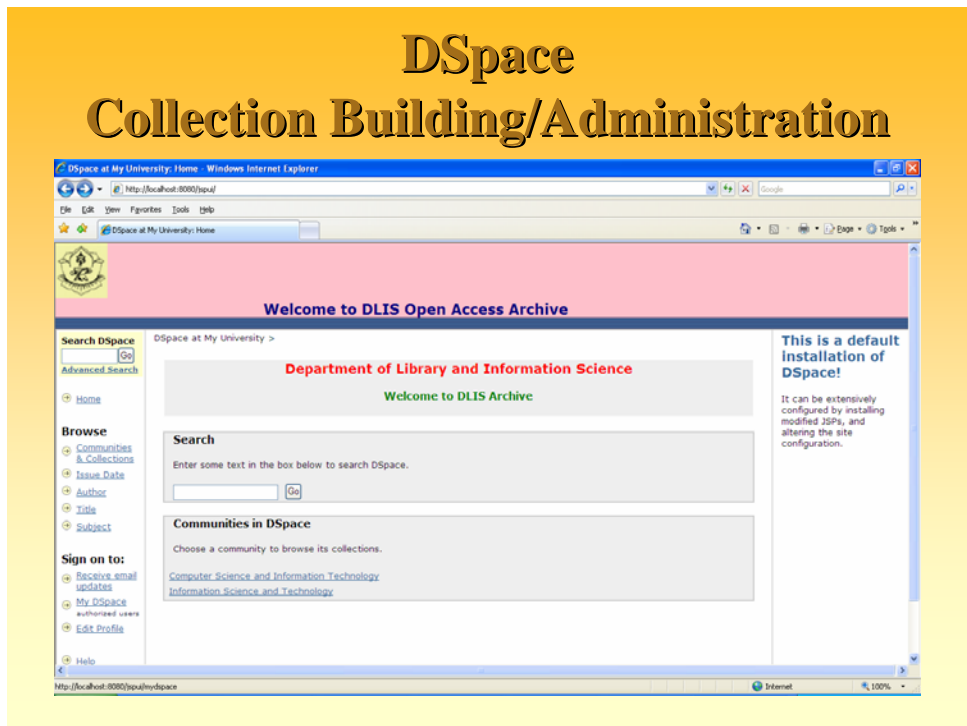
DSpace JSP User Interface



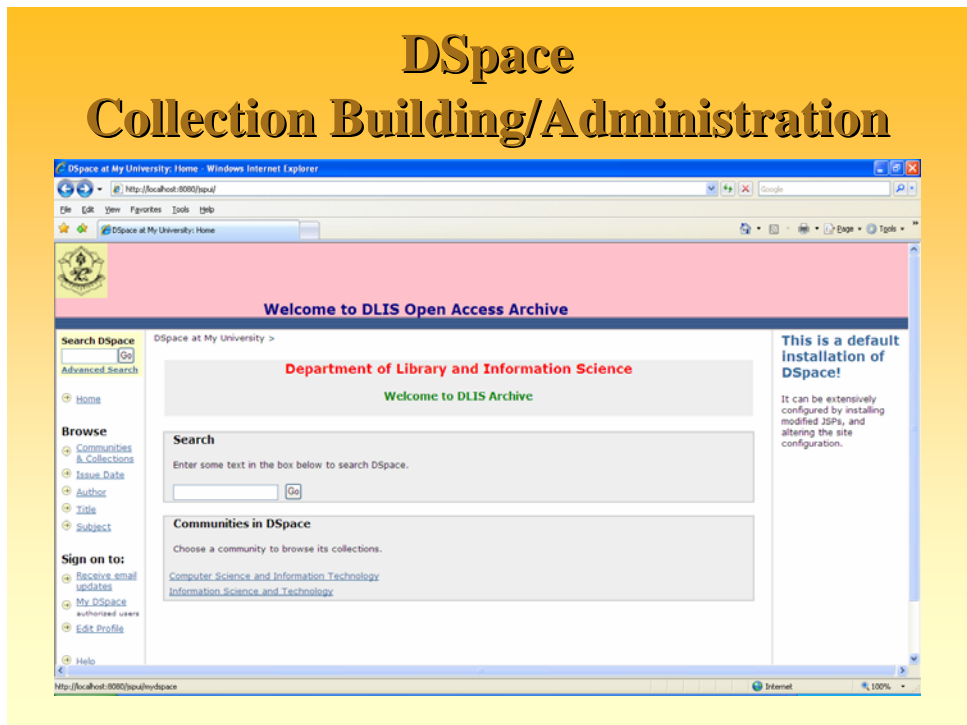
DSpace XML User Interface



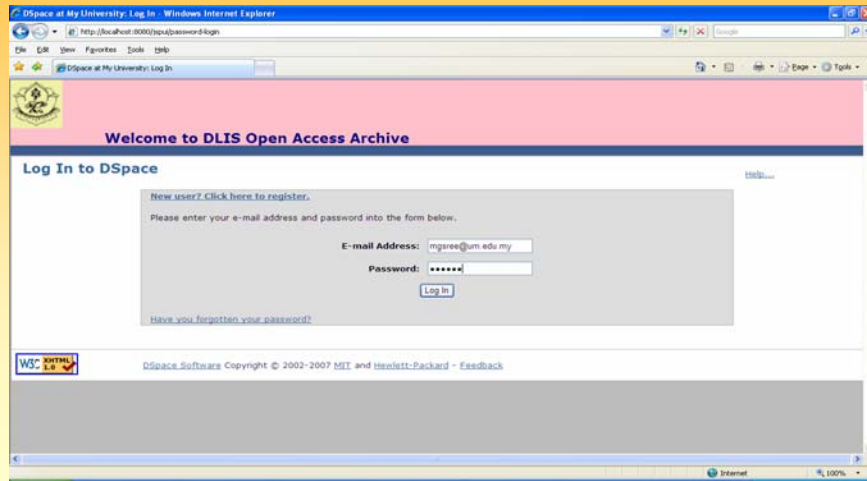
DSpace Collection Building/Administration



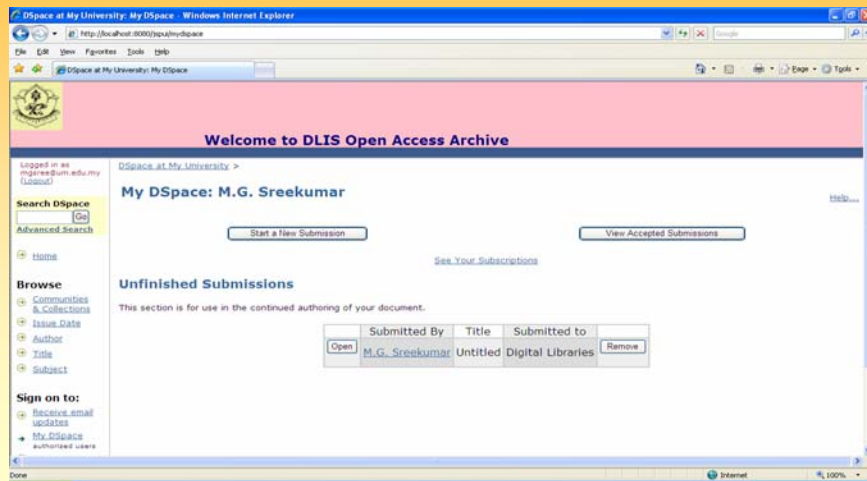
DSpace Collection Building/Administration



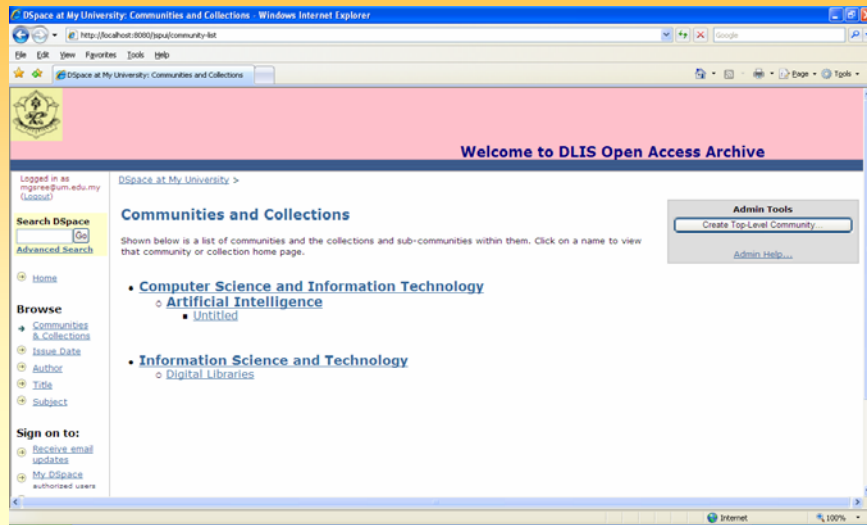
MyDSpace Login



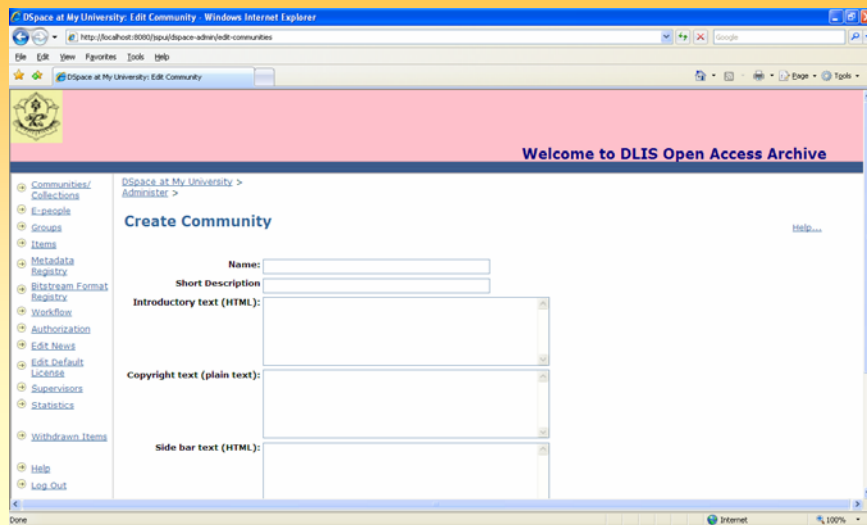
MyDSpace



Communities and Collections



DSpace Demo



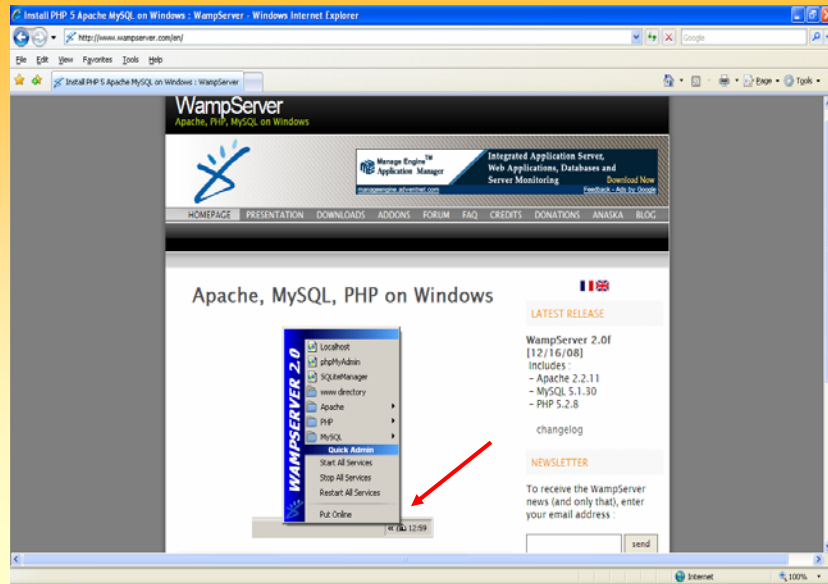
WAMP

- Windows
- Apache
- MySQL
- PHP

Installing WAMP Server

- Download WAMP from <http://www.wampserver.com/en/download.php>
- Click and Install
- Give the default installation location to C:\wamp
- Click the WAMP Icon at the System Tray
- Test for Local Host in the Browser – You will get the WAMP Page

WAMP Icon in the System Tray



OAI Harvester

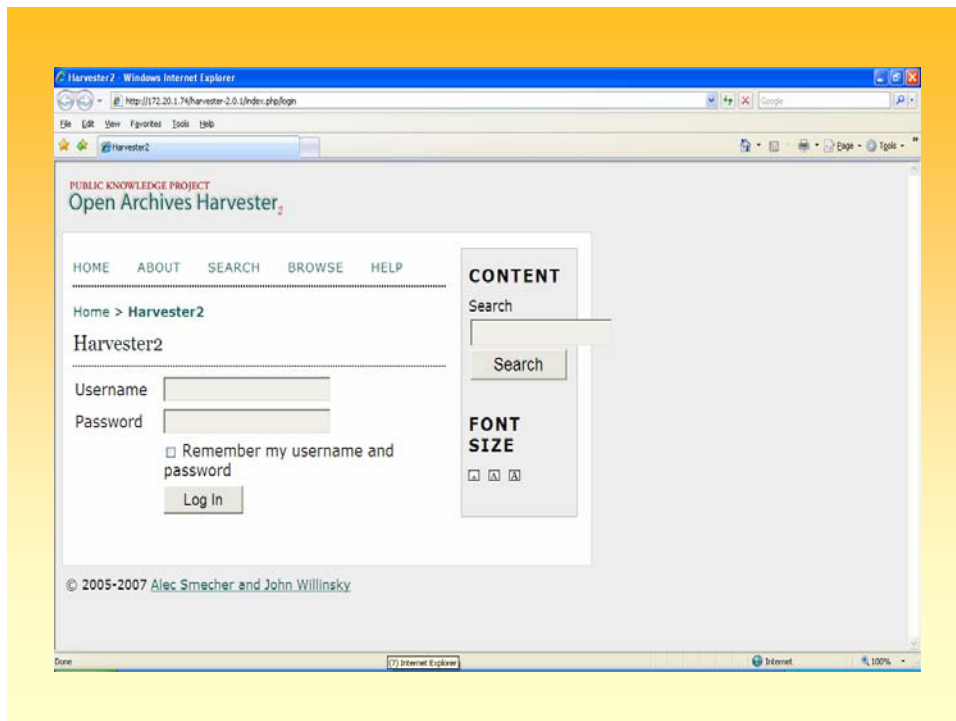
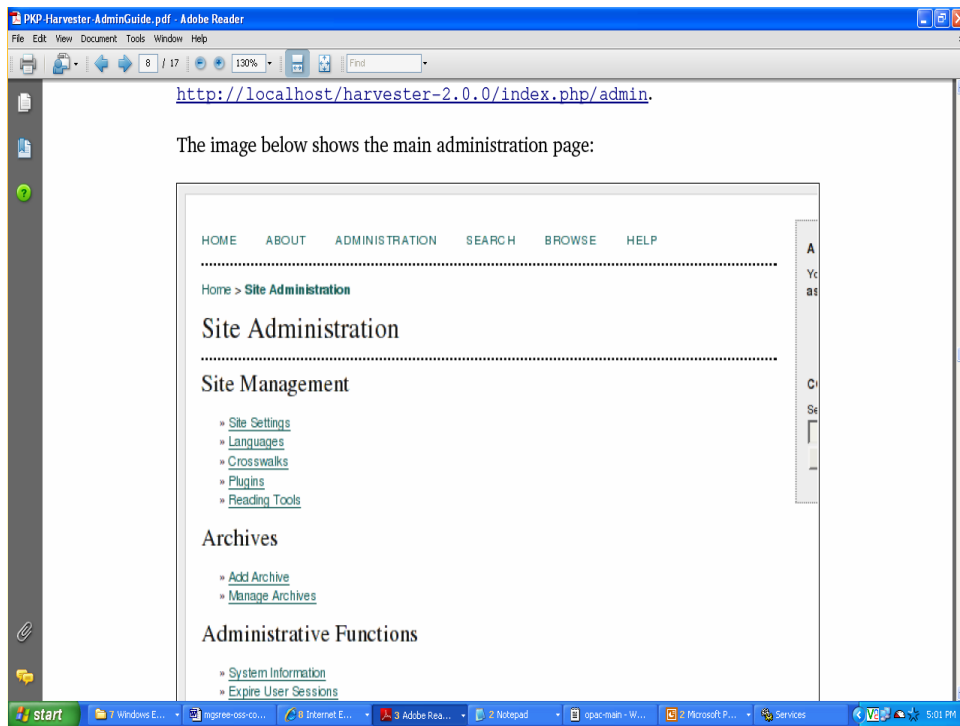
- **Open Archives Harvester**
- The PKP Open Archives Harvester is a free metadata indexing system developed by the Public Knowledge Project through its federally funded efforts to expand and improve access to research.

Installing PKP Harvester

- Download PKP Harvester from <http://pkp.sfu.ca/?q=harvester>
- Unzip the .gz and the .tar files to `C:\wamp\www\harvester2`
- Open the file `index.php` in the Web Browser - <http://localhost/harvester2/index.php>
- Give the necessary parameters/data as required
- Click on “Install Harvester”
- Check for successful installation/debug
- The OAI Harvester is now available at <http://localhost/harvester2/>

Adding and Managing Archives

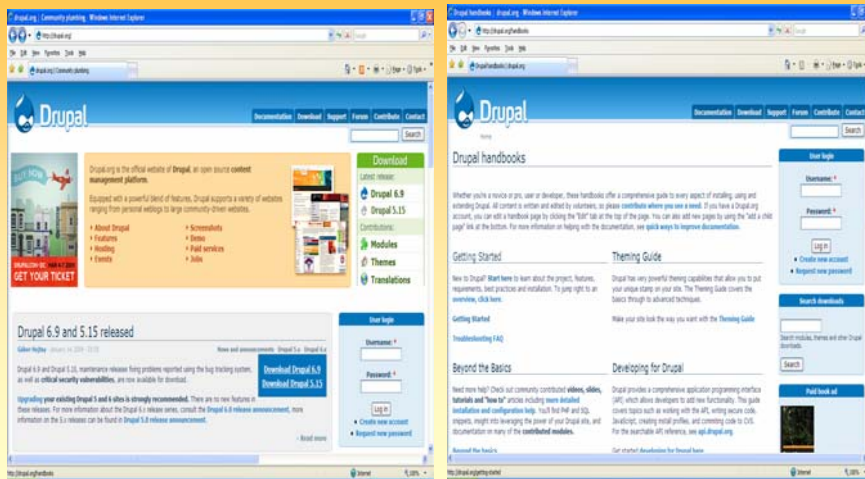
- Download PKP Harvester from <http://pkp.sfu.ca/?q=harvester>
- Unzip the .gz and the .tar files to `C:\wamp\www\harvester2`
- Open the file `index.php` in the Web Browser - <http://localhost/harvester2/index.php>
- Give the necessary parameters/data as required
- Click on “Install Harvester”
- Check for successful installation/debug
- The OAI Harvester is now available at <http://localhost/harvester2/>

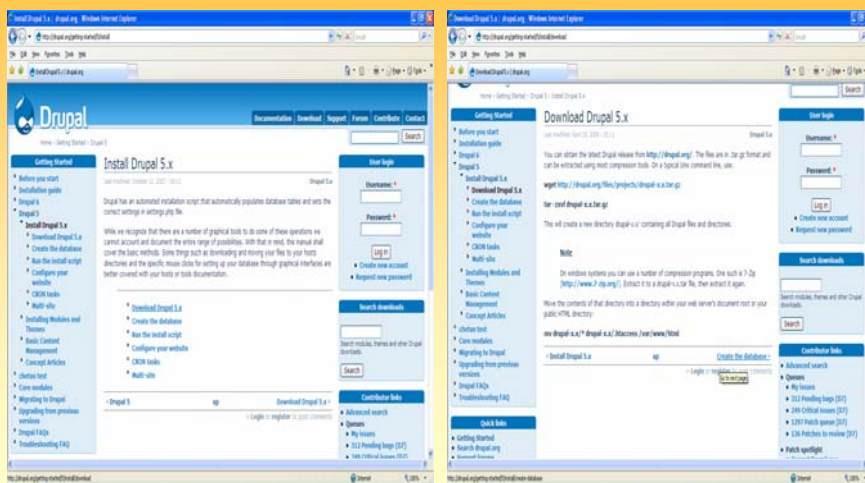
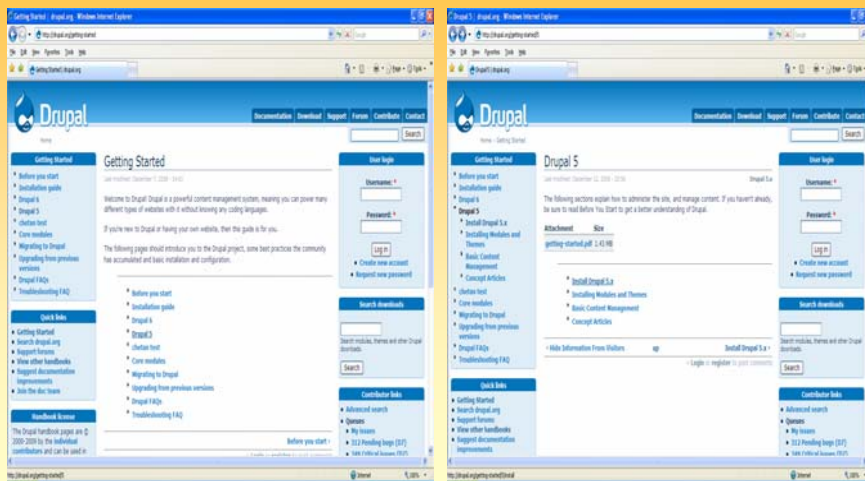


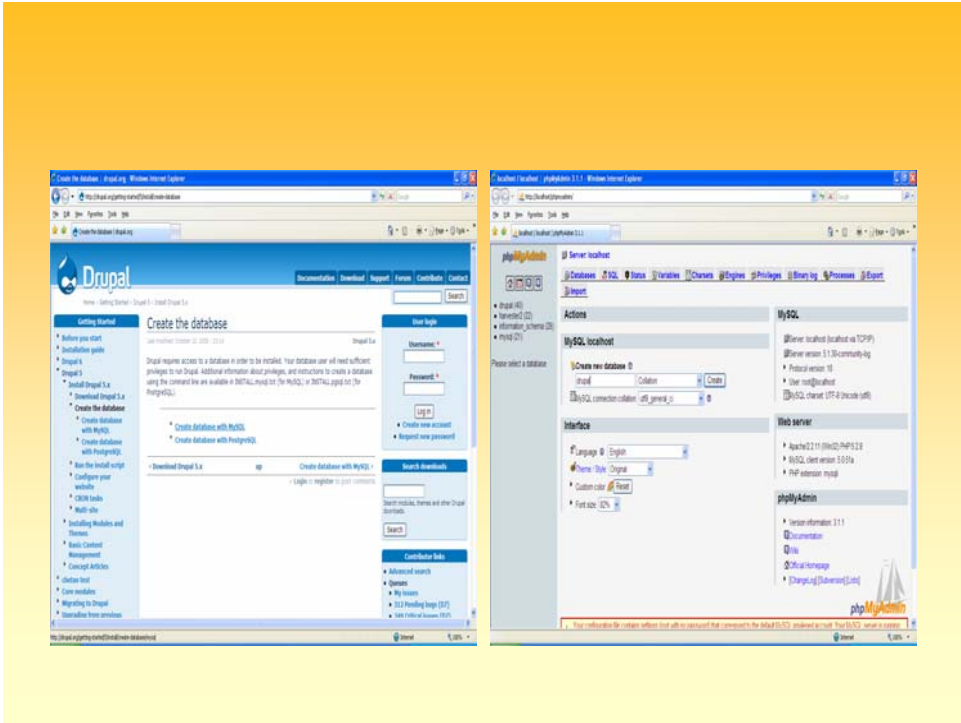
Drupal Content Management System



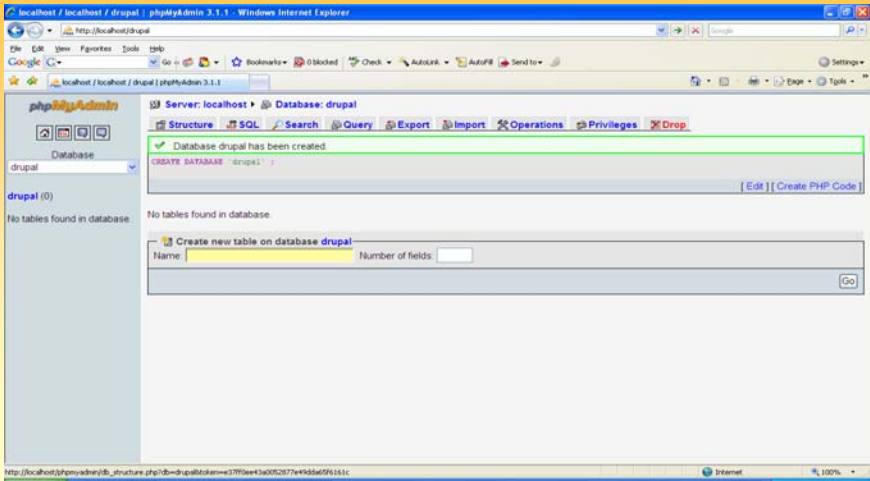
www.drupal.org



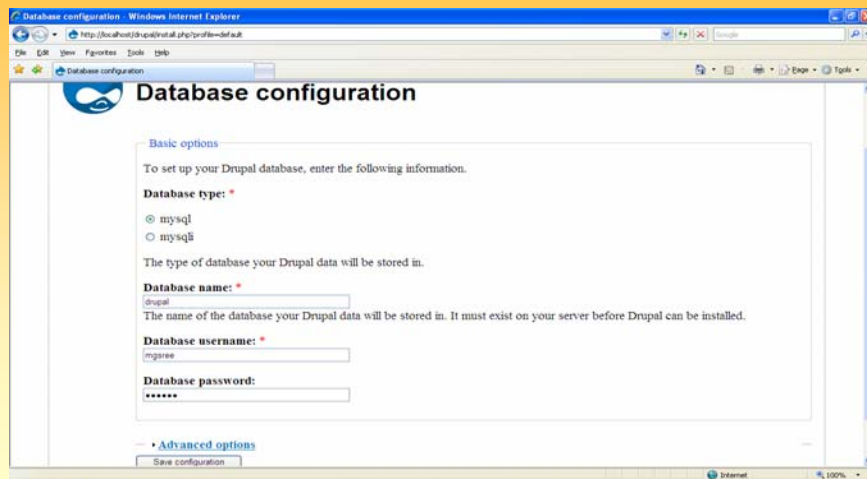




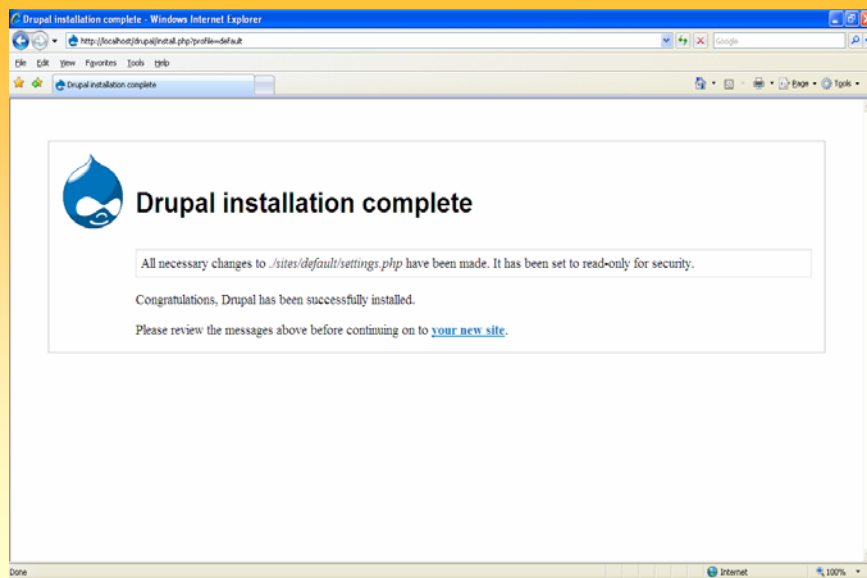
Database Created

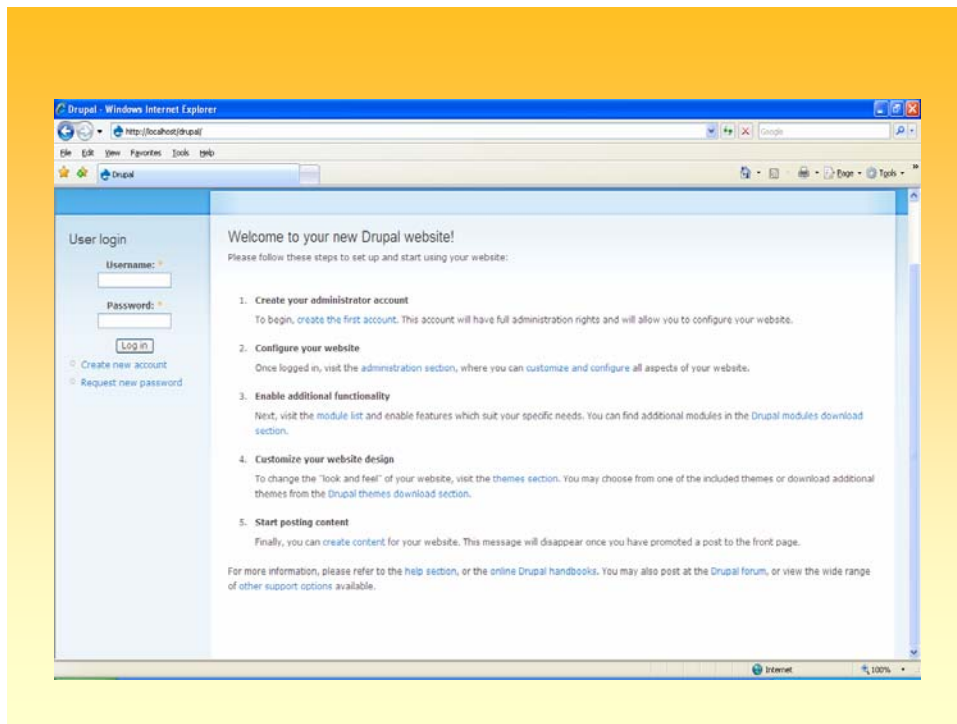


Give “Install.php” at Localhost



The screenshot shows the 'Database configuration' page in a Windows Internet Explorer browser. The address bar shows the URL `http://localhost/drupal/install.php?profile=default`. The page title is 'Database configuration'. The main content area is titled 'Basic options' and contains the following text: 'To set up your Drupal database, enter the following information.' Below this, there are three sections: 'Database type:' with radio buttons for 'mysql' (selected) and 'mysqli'; 'Database name:' with a text input field containing 'drupal'; and 'Database username:' with a text input field containing 'mgsaree'. There is also a 'Database password:' field with masked characters. At the bottom of the form, there is a 'Save configuration' button and a link for 'Advanced options'.





Drupal Core

- Drupal Versions
- Hook
- Themes
- Nodes
- Blocks
- Menus
- URL's
- Taxonomy
- Users

Westlake Porter Public Library

WESTLAKE
Porter Public Library
"...to educate, empower, enlighten and excite..."

LIBRARY ACCOUNT NEW MATERIALS SEARCH CATALOG RESEARCH RESOURCES

Search our catalog
Enter search terms here...

Keywords Search Now

Free downloadable video

NEW AND IMPROVED!
Now with More Hollywood flicks!

DOWNLOAD VIDEOS FROM HOME
24 HOURS A DAY 7 DAYS A WEEK

FOR FREE!
MyLibraryTV

HAVE QUESTIONS?
SEE A FAQ - VIEW A VIDEO LISTING
GET STAMPED
CLICK HERE

For instructions on installation and upgrading, [click here](#).
Click here to view a

Madeline Levine at Westlake Performing Arts Center

WPC presents
WESTLAKE PARENT CONNECTION

- April 1, 2008
- 7:00 p.m.
- Westlake Performing Arts Center
27333 Millard Blvd., Westlake, OH 44143

This event is **FREE** and open to the public. Registration is not required, but is recommended. Call Moca at 440-899-0053 or e-mail parentcon@westlakeparentconnection.com.

Dr. Madeline Levine
Child psychologist, parenting expert and author of "The Price of Privilege"

Backed by cutting edge research, 25 years experience as an educator, school consultant and practicing clinical psychologist, Levine delivers thoughtful, practical advice to parents on how to help their kids navigate a world of materialism, pressure to achieve, perfectionism, disconnection

Library hours and phone
Monday - Thursday:
9:00 AM - 9:00 PM
Friday & Saturday:
9:00 AM - 5:00 PM
Sunday: 1:00 PM - 5:00 PM (school year)
Main Number:
(440) 871-2600
Address:
27333 Center Ridge Road
Westlake, Ohio 44145-3925

WPPL Scene

Friends of Porter Library present,
The Rowa-ring Tigers Bell Choir
as part of Sunday Sounds

<http://www.westlakelibrary.org>

Monterrey Technology Library

Dirección de Biblioteca
Tecnológico de Monterrey, Campus Monterrey

Inicio Contáctanos Mapa del sitio

Catálogo Buscar

Navegación

- Sobre la Biblioteca
- Mis Servicios
- Buscar: libros, artículos, revistas, bases de datos etc.
- ¿Cómo hago para...
- Pregunta a un experto
- Contáctanos
- Cursos y capacitación
- Profesores
- Noticias, eventos y exposiciones

Novedades

Contenido popular

Hoy:

- Renovar libros, ver multas y apartados
- Colección de Tesis
- Cámara Web en Sala de Estudio 1º piso

Cámara Web 1º piso
Puedes ver la ocupación del 1º piso aquí.

iBienvenido!
Tenemos más de 2,000,000 de libros, revistas, mapas, DVDs, CDs y más disponibles para ti en nuestro edificio, en la [Biblioteca Digital](#) y en [otras bibliotecas](#).

Noticias y novedades

Programa del Acervo Académico Departamental
por ydominguez · 13 Marzo, 2008 · 11:56

Estimados Profesores, les recordamos que durante este mes de Marzo podrán hacer la solicitud de libros para el Acervo Académico Departamental como lo señala el comunicado de [Entrega Oportuna del 15 de Febrero de 2008](#)

Esta "Guía para la solicitud de libros del Programa para el Desarrollo del Acervo Académico Departamental" contiene los requisitos de este programa, y podrá seguir con facilidad los pasos y recomendaciones.

Reiteramos la liga para la solicitud: http://biblioteca.itesm.mx/nav/mi_compra.php, esperamos tener pronto sus sugerencias para conformar este acervo.

<http://biblioteca.mty.itesm.mx>

School Library System of Genesee Valley Boces

SCHOOL LIBRARY SYSTEM
OF GENESSEE VALLEY BOCES

GVBOCES Media Library Contacts Programs Username: Password: Log in

Fish4Info
Member Library Portals

Search in SchoolCat
Limit to Genesee Valley

Search in WorldCat
Powered by WorldCat.org

Latest Newsletter
February Newsletter
2008 Horizon Report, tour of the new SLS website, introduction to Leah Hamilton who will be facilitating the upcoming book repair workshop, proud practices at Avon Primary, and spotlight on Ticket to Ride.
SLS February Newsletter.pdf

The School Library System (SLS), established by Commissioner's Regulations in 1985, is a fully state funded program. It supports the instructional program and informational needs of the students and staff in the public and non-public schools of the Genesee Valley BOCES region. An advisory council of librarians, administrators, technology representatives and teachers determine policy, and a liaison group of School Library Media Specialists representing each of the 22 public school districts and non-public school representatives determines procedures.

Christopher Harris, Coordinator, School Library System/Library & Media Services

<http://sls.gvboces.org>

Hamline University Law Library

HAMLIN
UNIVERSITY
SCHOOL OF LAW

Home Prospective Students Current Students Alumni Community

Search

Directory Login Contact Apply

Law Library Home
Find Books & Other Titles
Find Periodical Articles
Do Legal Research Online
Use Library Services
About the Library & Staff
Faculty Scholarship
Self-Help & Referrals

Hamline Law Library
1536 Hewitt Avenue
Saint Paul, MN 55104
651.523.2125
Hours: Floor Maps
Driving Directions

CLICnet Catalog Search

Quick Links
First-Year Orientation
New Titles | CALL
Reserves & Exams
Netmail or Pipeline

<http://law.hamline.edu/library/law-library.html>

SWON Libraries

SOUTHWEST OHIO AND NEIGHBORING
SWON
LIBRARIES

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Search

Events & Training

[Event Calendar](#)
[Driving Directions](#)
[Training Partners](#)

Organization

[Groups & Committees](#)
[Discussion Forums](#)
[Membership Levels](#)

Resources

[For Members](#)
[Technology](#)
[Library Employment](#)
[Media Catalog](#)
[Online Projects](#)

SouthWest Ohio and Neighboring Libraries is a cooperative of area libraries organized to promote library services among and through member institutions. SWON Libraries consists of academic, public, school and special libraries in Southwest Ohio and Northern Kentucky.

SWON Libraries Brings Bugs to the Region

Everyone was a little bit buggy last week in the SWON Libraries Region. With the help of the State Library of Ohio, SWON Libraries hosted three workshops for children's librarians with the theme: [Catch the Reading Bug @ Your Library](#). The workshops are intended to share ideas for the annual Summer Reading programs that will be held by public libraries throughout the state.

Workshops were held in West Chester, London, and Eaton. 101 librarians participated in the day-long events. Librarian presenters shared book and activity suggestions for programs and storytime sessions for four age groups. Recipes for edible snacks were shared and craft demonstrations took place. Several performers provided previews of their offerings from summer reading events including a ventriloquist, magician, and musician.



Each day concluded with a die cutting party where the librarians were invited to cut out their own "bugs" to use for their events with a large variety of dies supplied by SWON Libraries.



RSS Feeds

[News Items](#)
[Events](#)
[Employment](#)
[Photos](#)
[What is RSS?](#)

Upcoming Events

April 1st
[Shared Storage Solutions: What Are the Issues?](#)

April 4th
[Genealogy Interest Group Meeting in Covington](#)

April 7th
[Ohio Ready to Read Basic Training in Wilmington](#)

[More Events »](#)

<http://www.swonlibraries.org>

Drupal & Libraries Trends

- Libraries are using it to distribute the management of website content
- Drupal is being used to empower students, faculty, and staff to create their own content
- Most libraries who have done one website in Drupal have had positive results and are expanding their Drupal efforts
- Many smaller projects are being created by librarians
- Drupal is often used to present new and different views of library content
- Commonly used for library staff intranets

Five Modules Librarians Should Know About

1. Bibliography Module
 - Manage & display lists of scholarly publications
 - bibTex and Endnote Import/Export
 - <http://drupal.org/project/biblio>
2. Marc Record
 - Creates a library catalog by importing Marc records
 - <http://drupal.org/project/marc>
3. Book Review
 - Publish book reviews
 - Fields for unlimited authors, booktitle, cover image, publisher, copyright, isbn, # of pages, price, synopsis, table of contents and the review text
 - <http://drupal.org/project/bookreview>

Five Modules Librarians Should Know About

4. Millennium
 - Searches Innovative Interfaces' Millennium WebOpac for MARC records
 - Creates a Drupal-based library catalog
 - <http://drupal.org/project/millennium>
5. Z39.50 Search
 - Searches the world's libraries and presents results
 - <http://drupal.org/project/z3950>

Open Web Design

The screenshot shows the Open Web Design website homepage. The browser title is "Open Web Design - Download Free Web Design Templates - Windows Internet Explorer". The address bar shows "http://www.openwebdesign.org". The page has a blue header with the "Open web design .org" logo. A navigation menu includes "Home", "FAQ", "About Us", "Login", and "Register".

Design Related

- Browse Designs
- Search Designs
- Am I Design or Not?
- Most Popular Designs
- Fast Design Contests
- Designs in Action
- Link to us!
- User Home Page
- Forum

FREE WEBSITE RESOURCES

- Flash Templates
- Web Templates
- CSS Templates
- Vector Icons

Open Web Design is a community of designers and site owners sharing free **web design templates** as well as web design information, helping to make the internet a prettier place!

Latest Designs

Recently Approved Designs

Design	By	Date	Type	W3C	IMG	CSS
	gatomdesign	D/Lk 1315	W3C	yes	yes	yes
	gatomdesign	D/Lk 1199	W3C	yes	yes	yes
	gatomdesign	D/Lk 1043	W3C	yes	yes	yes
	gatomdesign	D/Lk 1022	W3C	yes	yes	yes

Forum

Topic	Replies	Last Reply
What program do you use?	37	12/20/08
funny animations	7	12/19/08
javascript templates	0	12/19/08
Google Rankings	14	12/17/08
Accessibility User Testing / Evaluation	5	12/17/08
Lessons for a powerful Web Browser	14	12/17/08

New Web Design Contest: Prize 2000 Cash!

Posted by shey on 12/15/2008 @ 07:32am

Please see the [contest information page](#) for details. Theme for this contest is "Spring Design." Deadline for entries will be Sunday, Tuesday 1st April. The judges will be [Shay](#), and Our sponsor [Free CSS Templates](#) For examples of submissions, see [this link](#).

1000s of Designs

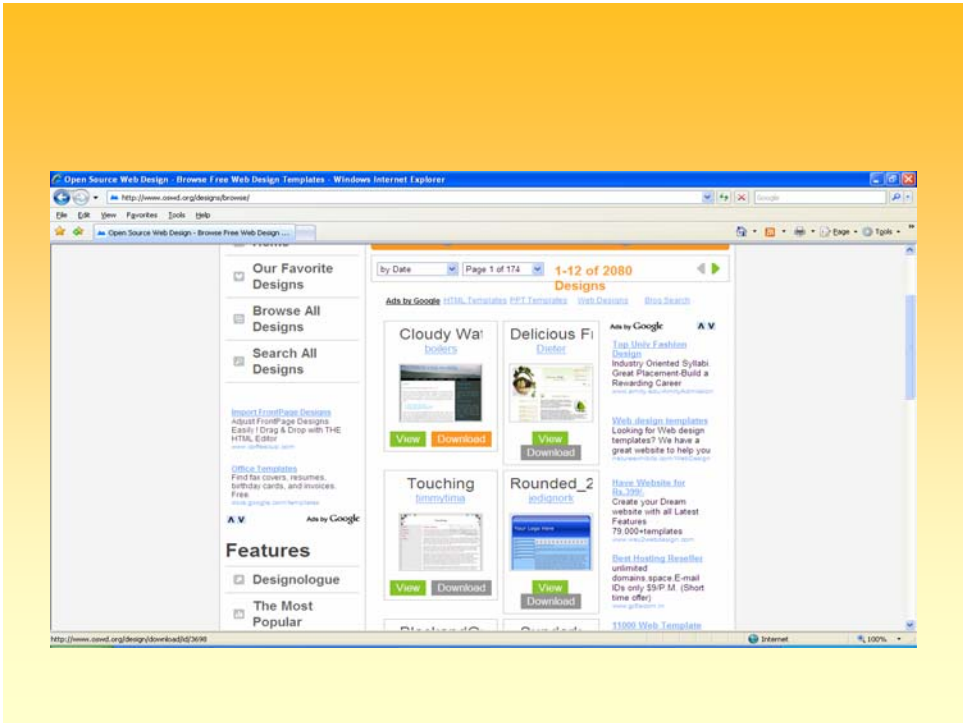
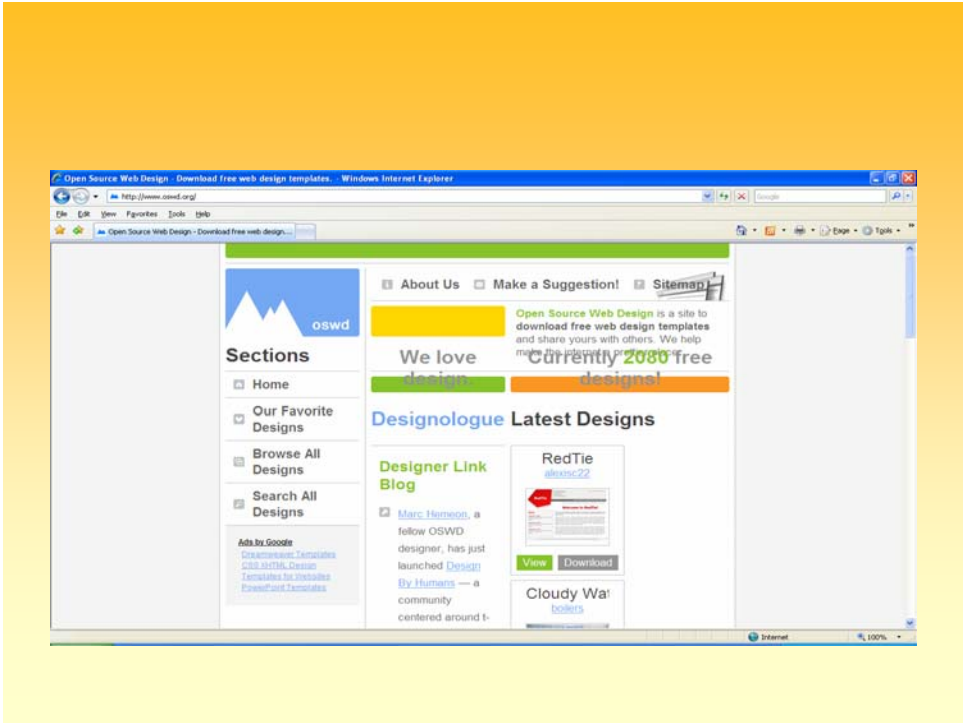
The screenshot shows the "Browse Designs" page on the Open Web Design website. The browser title is "Open Web Design - Browse Designs - Windows Internet Explorer". The address bar shows "http://www.openwebdesign.org/browse.php?P=2532&id=456762349656335053059".

Browse Designs

Date (Newest)

Previous Page | Page 1 of 298 | Next Page

Design	By	Date	Type	W3C	IMG	CSS
	gatomdesign	D/Lk 1315	W3C	yes	yes	yes
	gatomdesign	D/Lk 1199	W3C	yes	yes	yes
	gatomdesign	D/Lk 1043	W3C	yes	yes	yes
	gatomdesign	D/Lk 1022	W3C	yes	yes	yes
	gatomdesign	D/Lk 1297	W3C	yes	yes	yes
	gatomdesign	D/Lk 1274	W3C	yes	yes	yes
	gatomdesign	D/Lk 1240	W3C	yes	yes	yes
	gatomdesign	D/Lk 1200	W3C	yes	yes	yes
	gatomdesign	D/Lk 1201	W3C	yes	yes	yes
	gatomdesign	D/Lk 1157	W3C	yes	yes	yes
	gatomdesign	D/Lk 1177	W3C	yes	yes	yes
	gatomdesign	D/Lk 1100	W3C	yes	yes	yes





DL - Hardships

- Copyright Issues
- Technology Complexities
- Infrastructure Issues
- Publications/Formats – Diverse Datastreams
- Digital Objects/Formats - Multiple
- Publishers' Policies – Stringent, Inconsistent

Major Tasks

- Content identification (internal / external)
- Content Creation
- Content Collation/Signposts
- Organisation
- Updation
- Retrieval / Dissemination
- User Training
- Archiving

DIGITAL LIBRARY ARCHITECTURE

