LibX - Motivation, Development, and Implementation

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LibX - Overview

- LibX is a localized Firefox extension that integrates access to library resources into the browser
- Motivation – why do we need it?
- Background – why did we build it?
- Demonstration – what does it do?
- Editions – how to get one for your library?

The Age of the Web

- Data from *OCLC 2005* Study on "College Students' Perceptions of Libraries and Information Resources"
- 89% of college students start information search with a search engine
  - vs 2% start with the library website

This Should Concern Us Because…

- Google* does not vet sources
- Google's* page ranking algorithm does not reflect relevance
- Google* lacks metadata
- Google* does not provide access to all possible sources (e.g., print holdings)
- Google* does not know about local resources

* Substitute your favorite search engine here

Perceptions of Libraries vs Search Engines

- Libraries lead in
  - Trustworthiness & Credibility 77% to 23%
  - Accuracy 76% to 24%
- Search Engines lead in
  - Speed 90% to 10%
  - Convenience 84% to 16%
  - Ease Of Use 87% to 13%
  - Cost Effectiveness 71% to 29%
  - Reliability 63% to 37%

Our Challenge

- How can librarians provide users with resources that are
  - Accurate
  - Trustworthy
  - Complete
  - Accessible
- while providing the ease of use, integration, and availability of modern search engines?

Idea: a “library tool” for the Web

- Developed in summer of 2005
- A “virtual librarian” that guides users to library resources while they use the Web
- Library Tool
  - integrates access to library resources into the users’ “webflow”
  - integrated into browser

LibX History

- Researched existing library toolbars & extensions, scripts, bookmarklets,…
- Found a number of toolbars
  - FASTJack, HALbar, etc.
- Web localization services
  - Library Lookup project (Bookmarklets, Greasemonkey scripts)
  - WAG The Dog project

However…

LibX History (cont’d)

- Existing toolbars were not adaptable (or adoptable!) for use by other libraries
  - Or it wasn’t easy to do so
- Existing toolbars were limited in functionality
- We wanted an easily adaptable infrastructure on which to deliver a wide variety of services

LibX

- Provides shortcut to library resources
- Uses Firefox browser extension technology
  - Integrated into the browser’s user interface
  - Installed on the client-side

What LibX Provides

- Direct Access to Catalog(s) and Databases
  - Integrated toolbar
  - Smart context menu
- Direct access to OpenURL resolver to find appropriate copy
  - Directly via toolbar or indirectly through Google Scholar
- Localization
  - Research companion that “hints” at library resources
  - Support for COinS

Catalog and Database Access

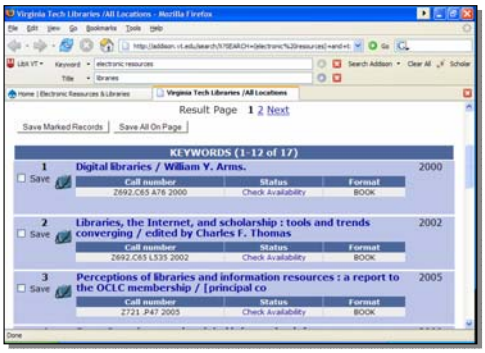
- Toolbar user interface
  - Supports single & multi-term searches
  - Not intended to replace “advanced search page” – captures common search pattern
  - Configurable to support multiple OPACs simultaneously
  - User can set display preferences
- Right-click context menu
  - Adapts to selections
- Predefined types
  - Millennium, iPac, Voyager, Aleph, Sirsi, SFX, Central Search, Article Linker, Google Scholar
- User-defined types
  - Local databases, etc.

Demonstration 1

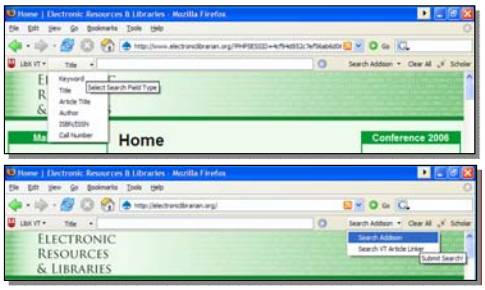
Toolbar, Context Menus

OPAC Toolbar

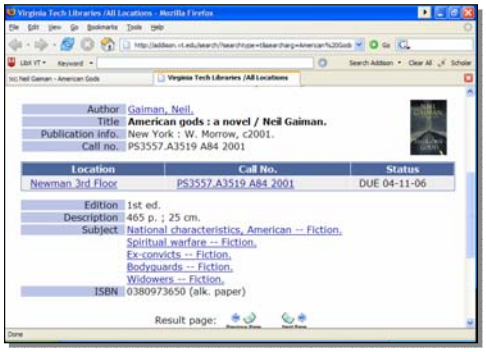
- Expands automatically for multi-term searches
- Offers commonly used search types:
  - Keyword, author, title, isbn, call number



OPAC Toolbar (2)

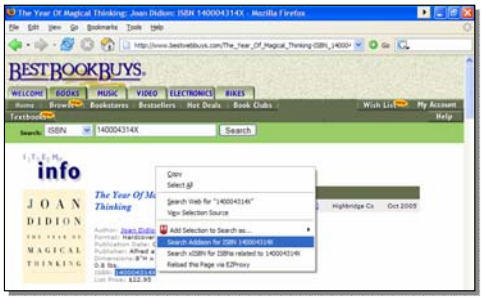


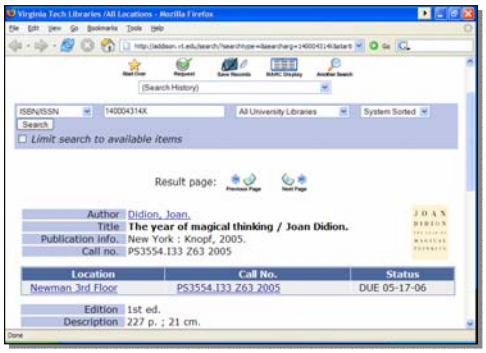
Context Menu



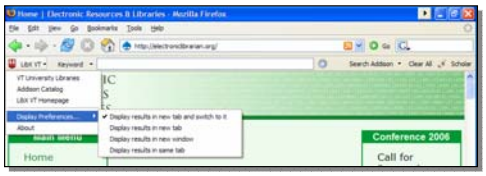
Nested Context Menu

Adaptive Context Menu



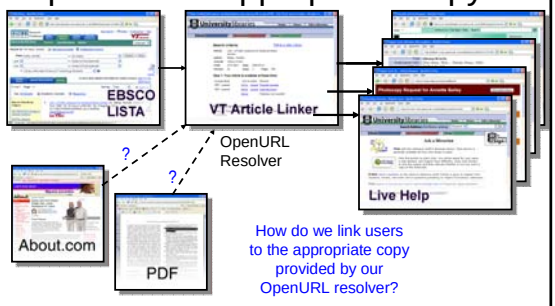


Display Preferences & Links

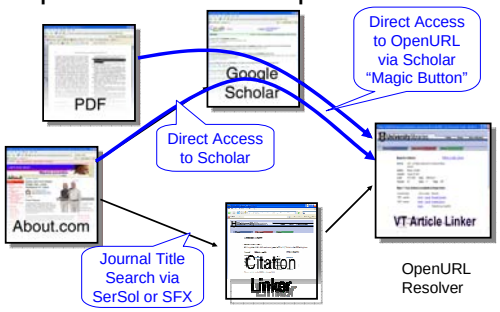


- Users can set preferences on how results should be displayed
- Libraries can configure links that are being displayed to users

OpenURL & Appropriate Copy



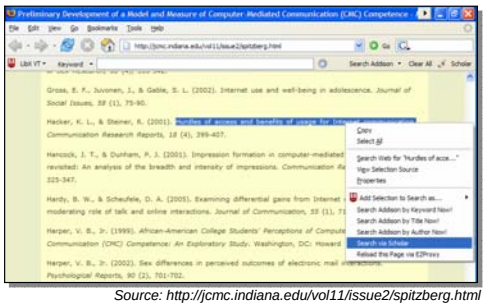
OpenURL Access Options in LibX



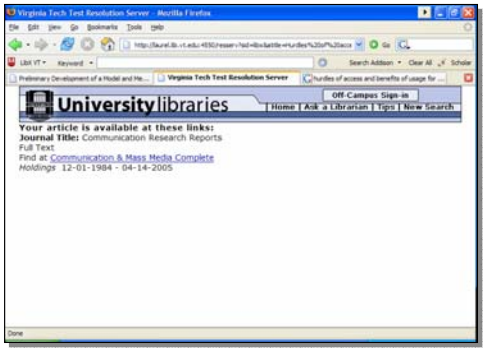
Demonstration 2

OpenURL Access &
The “Magic Button”

OpenURL Access via Scholar

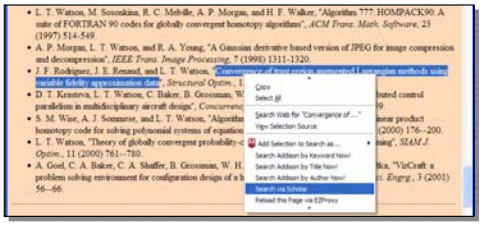


Source: http://jcmc.indiana.edu/vol11/issue2/spitzberg.html

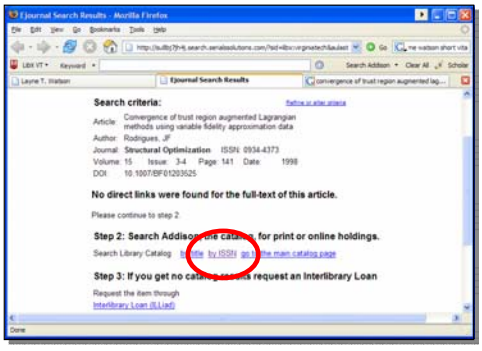


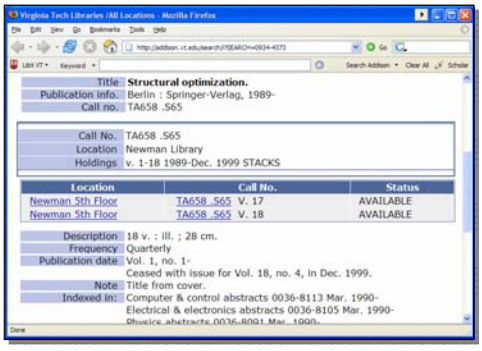
OpenURL Access via Scholar (2)

OpenURL can lead user to print resources if no electronic copy is available



Source: http://people.cs.vt.edu/~ltw/shortvita.html





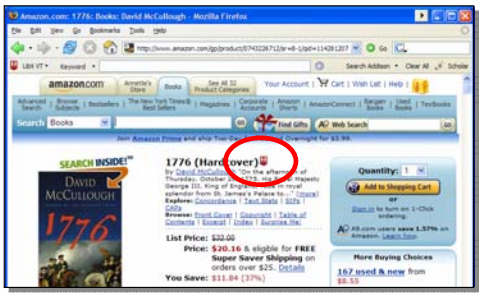
Localization via LibX

- LibX enriches web pages before they are displayed to the user
- Inserts hyperlinked "cues" that point at local library resources
  - E.g., amazon.com page points at library record of same book
- Implemented for: google.com, yahoo.com, bn.com, NY Times, Books in Print, …
- Includes support for COinS (ocoins.info)

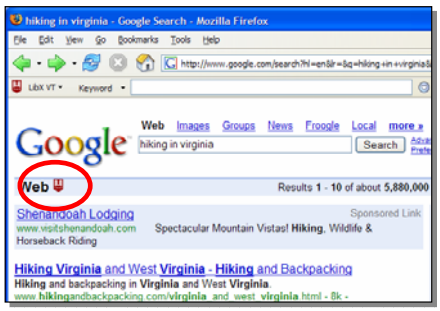
Demonstration 3

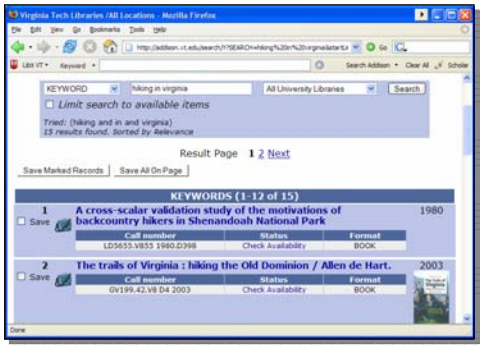
Localization using Cues

Cues on Amazon



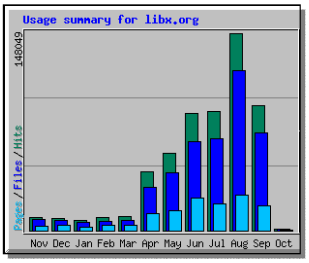
Google





One Year LibX

- VT Edition 1.0 went live Oct 13 2005
- 30 live editions as of today
- Downloaded & installed over 4,000 times – not counting test editions and not counting institutions who host it themselves.



Deployed Editions

How To Get A LibX Edition

- Options that are available today
  1. Download source and configure LibX yourself (libx.mozdev.org)
  2. Or, create a config file and send it to libx.org@gmail.com
     - Consult libx.org "Editions In Testing" page for examples – find libraries that use the same ILS and OpenURL resolver as you
     - We will work with you to get your edition up and running
- Go to http://libx.org for more information

Example Co

Naming and Version
libxversion=1.1

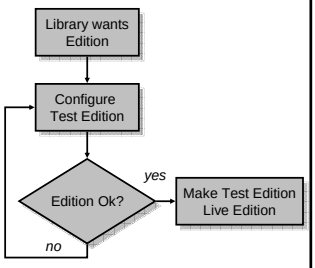
OpenURL Resolver Configuration

Remote Proxy, General Options & Logos
$proxy.type=wam
$proxy.url=helin.uri.edu
$proxy.name=PML Proxy Server

$libx.rewritescholarpage=true
$libx.supportcoins=true
$libx.sersolisbnfix=true
$libx.autolink=true
logoURL=chrome://libx/skin/pc-logo-large.jpg
emiconURL=chrome://libx/skin/pc-logo-16.jpg
emdescription=Toolbar for Phillips Memorial Library users
$millenium.keywordcode=X

The LibX Development Process

- Uses "agile" model that mixes development & testing
- Test editions are always built with latest version of code base
- But only tested builds are offered to users!



Upcoming Features

- Currently: LibX Team Member is involved in (re-)building every edition – huge bottleneck
- Received IMLS National Leadership Grant to support the development of LibX
- Edition builder interface
  - Goal: develop a wizard-type web interface where libraries can build a LibX edition interactively
  - Will need testers in the community
- Create a LibX plug-in for Internet Explorer

Give Us Feedback

- Send us your feedback if you're already using LibX or plan to use it
  - How do you like the user interface? What could be better/different/customizable?
  - What resources should we support out of the box?
  - Where would you like to see cues?
  - What other services (unAPI, etc.) would you like to see in LibX?
- Subscribe to our mailing list if you are interested in LibX's development

Questions?

- Thank you from the LibX Team

Annette Bailey
Godmar Back
Kiri Goldbeck

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Additional Material

LibX & Privacy

- Key goal: protecting LibX users' privacy
- Users do not reveal more information than they would if they used the library catalog
  - Exception: Referrer URL
- Tenet: Do not run queries unless user explicitly clicks on a link
  - E.g., no automatic holdings checking if user visits amazon
- Trade-off Privacy/Convenience

LibX & Security

- Firefox extensions are trusted
- Users must trust that extension is not malicious
- LibX does not support user-provided scripts
  - More secure than Greasemonkey
- Source code is available for anybody to inspect
- Future: sign extensions