

Defacing DSpace with Manakin

DSpace User Group, February 2006

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Outline

- Introduction to the XML UI project
- Moa & Manakin
- Manakin's structure
- Aspects & Themes
- Project status & Future work



What is The XML UI?

- The XML UI is a project to develop a new front-end for DSpace
 - Enable communities and collections to customize their interface
 - Separate business logic from stylistic design
 - Enable internationalization & localization of content
 - Provide an alternative interface
 - Modular interface to enable parallel development (new)
- History
 - o Moa
 - o Manakin



Why?

The XML UI provides:

- Branding
 - University level
 - Community level
 - Collection level
- Institutional / Community credibility
- Community ownership & buy in







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Increase community adoption of DSpace



What is Moa?

The first version of the XML UI project

- o DOM based
- Static three stage pipeline
- XSL Transformations
- Full Source code available at:
 - http://di.tamu.edu/projects/xmlui/moa/

Moa Screen shots:



What we learned from Moa

- Changing the look-and-feel for individual communities is useful.
- XSL based Themes work.
- DSpace needs an interface modularity system.
- Themes should use metadata in native formats.



What does Manakin add?

- Manakin is the next version of the XML UI project
 - Based upon the Apache Cocoon framework
 - Designed using Separation of Concerns
 - Uses a SAX based pipeline
 - Current source code available via CVS at:
 - http://di.tamu.edu/projects/xmlui/manakin/
- These technologies enable
 - *N*-stage pipeline architecture
 - o UI Modularity
 - Parallel Development





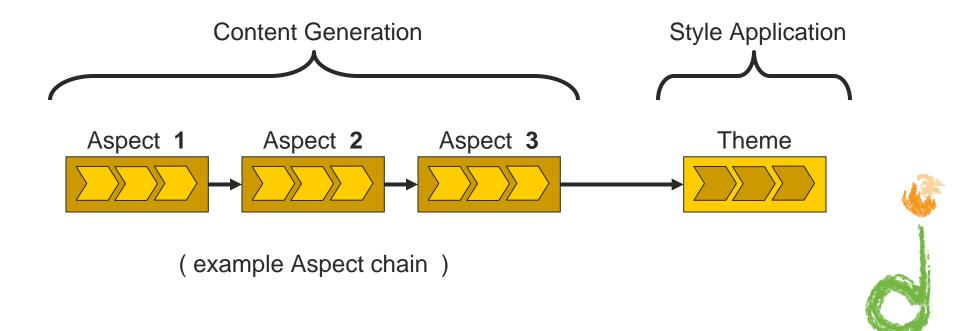
Manakin vs JSP UI

- Current JSP based interface
 - No presentation layer
 - Difficult to extend (and maintain!)
 - Heavy use of HTML table layout
- Manakin
 - Separate presentation layer
 - Ability to extend
 - Themes per communities / collections
 - Metadata in native formats



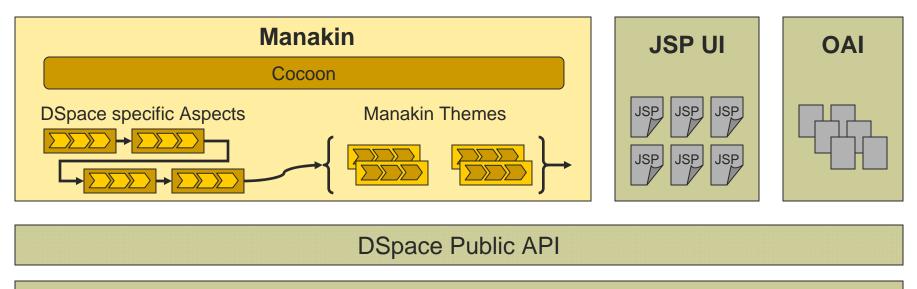
Manakin Structural Overview

Manakin uses a pipeline architecture composed of two parts:



Manakin & DSpace

 Manakin sits on top of DSpace along with other DSpace applications



Storage API

Project Status

- Cocoon-based Wing-framework
 - Chain Aspects
 - Apply selected theme
- Artifact Browser Aspect
 - Browse communities & collections by title, date, or authors
 - Search the repository
 - View items
- Themes
 - Reference theme completed



Future Work

- Develop the standard Aspects
 - All the current functionality of DSpace
- Future Theme Work
 - Standard Theme Library
 - Formats other than XHTML, such as PDF & WML
 - AJAX, RSS, STX and other hip "buzzword" technologies
- Future Aspect Work
 - Improved searching & browsing capabilities
- User selected themes



Example

Texas Digital Library

o <u>http://www.tdl.org/</u>

or

o Embedded Screen shots



Questions?

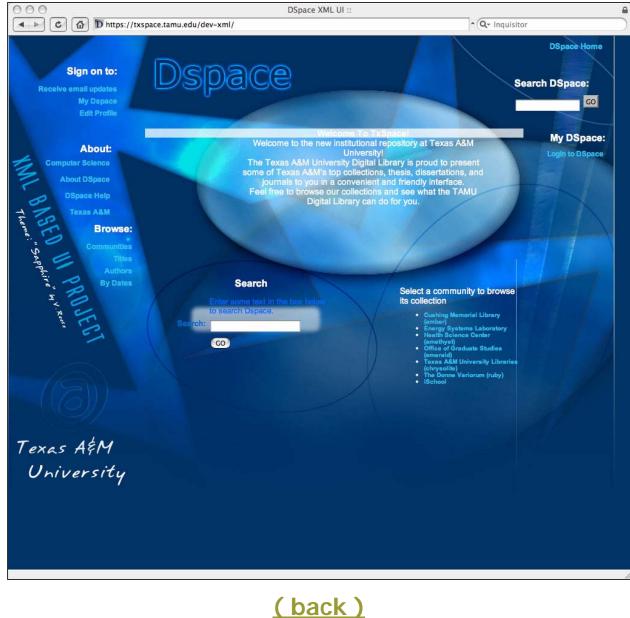
- More information may be found at:
 - o http://di.tamu.edu/projects/xmlui/manakin/
 - News and updates
 - Manakin Developers Guide
 - CVS Access



Folder Theme

Image: Comparison of the position of the positi	
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Search:	
Select a community to browse its collection	
<u>Cushing Memorial Library</u>	
Humanities Informatics My Example Community	
Office of Graduate Studies	
(back)	

Sapphire Theme



Introduction Theme

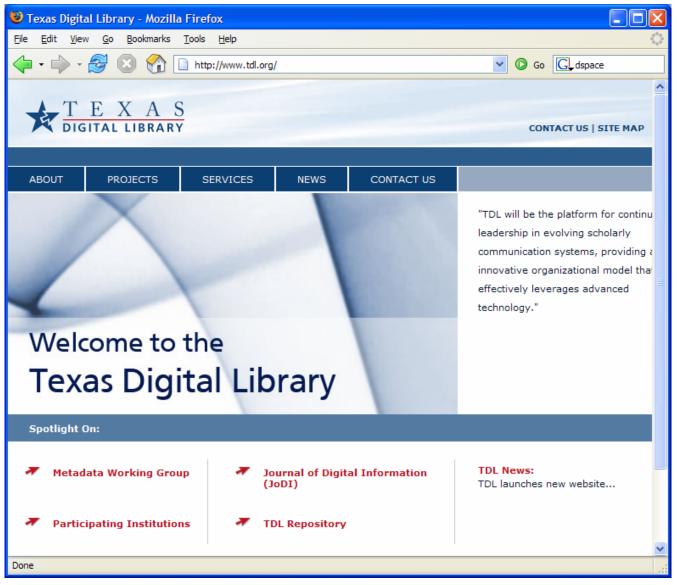
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Amber Theme

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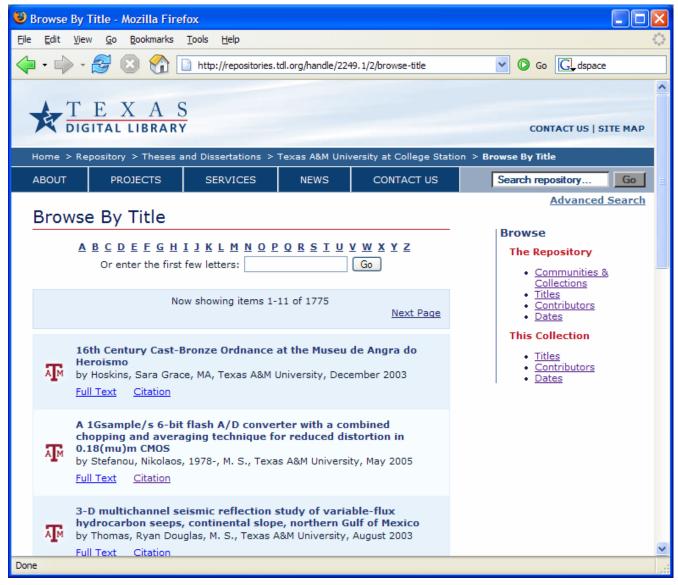
Texas Digital Library



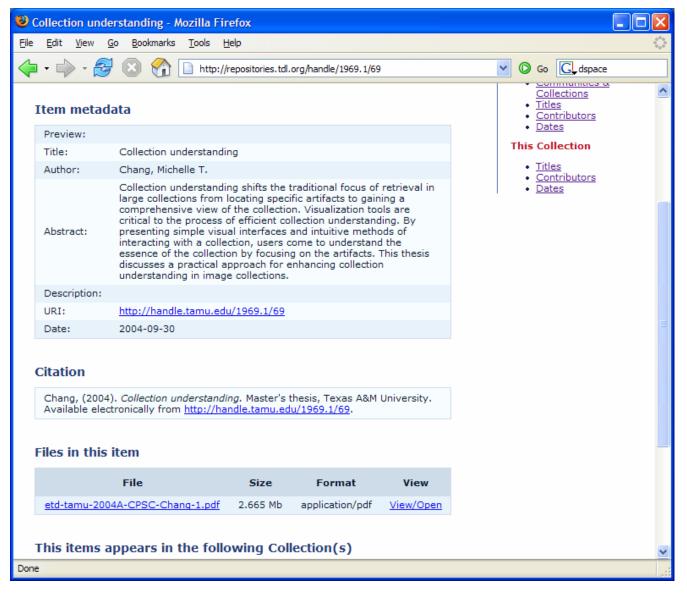
DSpace Homepage

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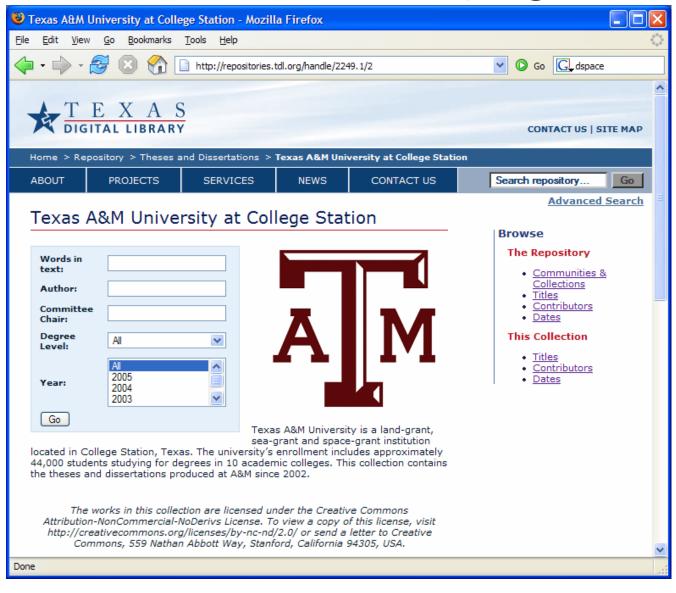
Browse By Title



Item View



Collection Homepage



<u>(back</u>)