Defacing DSpace with Manakin

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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
  - Moa
  - Manakin
Why?

- The XML UI provides:
  - Branding
    - University level
    - Community level
    - Collection level
  - Institutional / Community credibility
  - Community ownership & buy in

- Increase community adoption of DSpace
What is Moa?

- The first version of the XML UI project
  - 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
  - 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:

Content Generation

Aspect 1 → Aspect 2 → Aspect 3

( example Aspect chain )

Style Application

Theme
Manakin & DSpace

- Manakin sits on top of DSpace along with other DSpace applications
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
  - [http://www.tdl.org/](http://www.tdl.org/)

  or

- Embedded Screen shots
Questions?

- More information may be found at:
  - News and updates
  - Manakin Developers Guide
  - CVS Access