

Customizing the look-and-feel of DSpace with Manakin

Bharat M. Chaudhari
School of Petroleum Management
Pandit Deendayal Petroleum Management, Gandhinagar
bharat.chaudhari@ipmg.ac.in



Credit



John Leggett

Associate Dean, Texas A&M University Libraries
Professor, Department of Computer Science, Texas A&M University

Email: leggett@library.tamu.edu

Web: csdl.tamu.edu/~leggett/



Scott Phillips

Software Applications Developer

Email: scott@library.tamu.edu

Web: aggiescott.com



Cody Green

Systems Administrator

Email: cody@library.tamu.edu

Web: codygreen.com



Jay Koenig

Metadata Librarian

Email: jay@library.tamu.edu



Alex Maslov

Software Applications Developer

Email: alex@library.tamu.edu



What is Manakin?

Manakin & Moa?

Manakin is the final version of the DSpace XMLUI, based upon SAX & the Cocoon framework; compared to the earlier Moa, it offers improved efficiency and modularity. Moa is the earlier version of the DSpace UI, based upon a static 3 stage DOM model. With Manakin officially released, all development on Moa has ceased.



What was Manakin

Manakins are rare South American song birds. They are special because they use their wing feathers to produce rhythmic buzzes and hums.



Manakin

PART -I

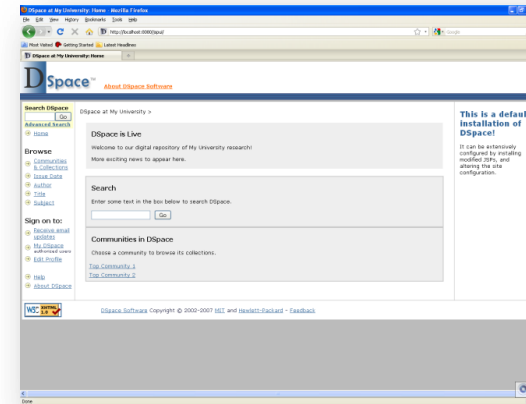
What is Manakin?

- ✓ A new face to DSpace
- ✓ *Modular*
- ✓ *Extendable*
- ✓ *Tiered*

Manakin vs JSPUI

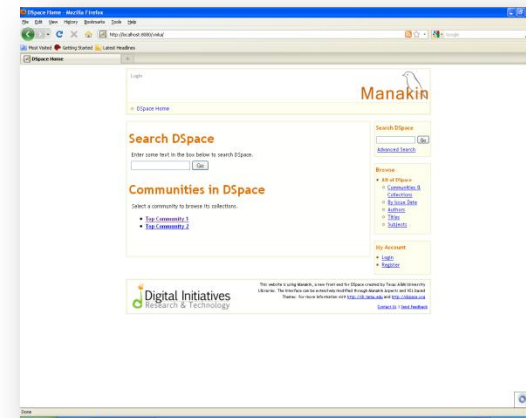
JSPUI (Java Server Pages)

- Difficult to extend
- Monolithic interface



XMLUI (Manakin Framework)

- Modular design
- Multiple interface
- Metadata in native formats



Tiers

1. Style Tier

- Create simple themes
- (X)HTML + CSS

2. Theme Tier

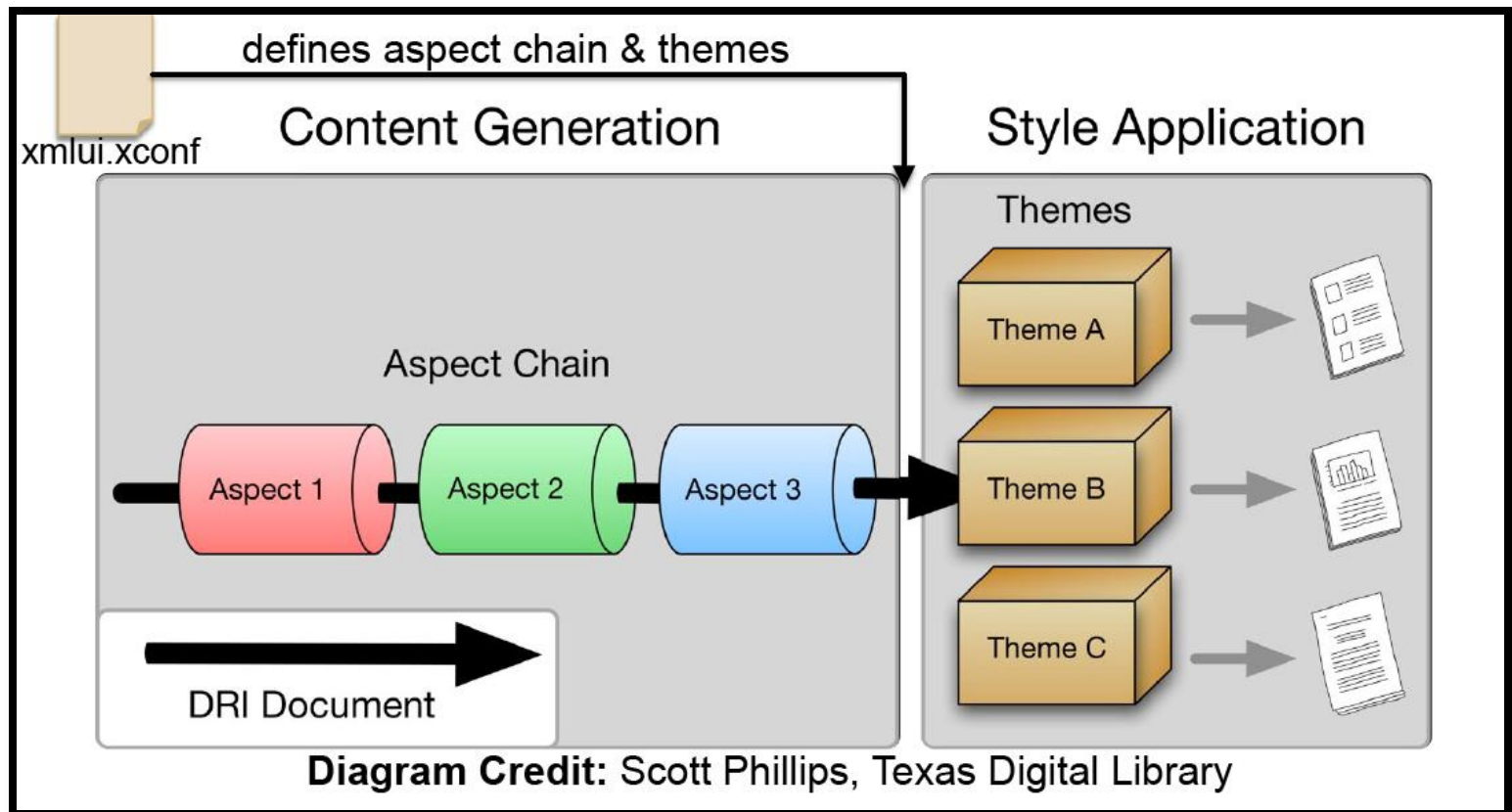
- Create complex themes
- XSL + (X)HTML + CSS

3. Aspect Tier

- Add new features
- Cocoon & Java

Tiers

XMLUI Architecture Overview



style tier

1. Coding with style tier
2. And with (X)HTML and CSS
3. walk around with Firebug

style tier

- ***Coding with style tier***

Required Skills

(X)HTML & CSS

style tier

Coding with style tier

What is XHTML?

- ✓ **XHTML™** is the Extensible HyperText Markup Language
- 1. **XHTML** is a stricter and cleaner version of **HTML**
- 2. **XHTML** documents are **XML** conforming. As such, they are readily viewed, edited, and validated with standard **XML** tools.

style tier

Coding with style tier

In **HTML**, some elements can be improperly nested within each other, like this:

```
<b><i>This text is bold and italic</b></i>
```

In **XHTML**, all elements must be properly nested within each other, like this:

```
<b><i>This text is bold and italic</i></b>
```

style tier

Coding with style tier

A common mistake with nested lists, is to forget that the inside list must be within `` and `` tags.

wrong:

```
<ul>
  <li>Book</li>
  <li>Journal
    <ul>
      <li>Black book</li>
      <li>Green book</li>
    </ul>
  <li>Report</li>
</ul>
```

correct:

```
<ul>
  <li>Book</li>
  <li>Journal
    <ul>
      <li>Black book</li>
      <li>Green book</li>
    </ul>
  </li>
  <li>Report</li>
</ul>
```

XHTML Elements Must Always Be Closed

wrong:

```
<p>This is the workshop  
<p>This is another workshop
```

correct:

```
<p>This is the workshop</p>  
<p>This is another workshop</p>
```

What is CSS?

- ✓ A CSS (cascading style sheet) file allows you to separate your web sites (X)HTML content from it's style. As always you use your (X)HTML file to arrange the content, but all of the presentation (fonts, colors, background, borders, text formatting, link effects & so on...) are accomplished within a CSS.
- ✓ Most of the visual changes are done in CSS

I. Internal Stylesheet

First we will explore the internal method. This way you are simply placing the CSS code within the `<head></head>` tags of each (X)HTML file you want to style with the CSS. The format for this is shown in the example below.

```
<head>
<title><title>
<style type="text/css">
CSS Content Goes Here
</style>
</head>
<body>
```

2. External Stylesheet

Next we will explore the external method. An external CSS file can be created with any text or HTML editor such as “Notepad” or “Dreamweaver”. A CSS file contains no (X)HTML, only CSS. You simply save it with the .css file extension. You can link to the file externally by placing one of the following links in the head section of every (X)HTML file you want to style with the CSS file.

```
<link rel="stylesheet" type="text/css" href="Path To  
stylesheet.css" />
```


DSpace uses external stylesheet method

in {sitemap.xmap} file the {style.css} is externally linked with value {"lib/style.css"}

```
-->
<map:match pattern="*">

  <!-- Step 1: Generate the DRI page -->
  <map:generate type="file" src="cocoon://DRI/{1}"/>

  <!-- Step 2 Add page metadata -->
  <map:select type="browser">
    <map:when test="explorer6">
      <map:transform type="IncludePageMeta">
        <map:parameter name="stylesheet.screen#1" value="lib/style.css"/>
        <map:parameter name="stylesheet.screen#2" value="lib/style-ie.css"/>
        <map:parameter name="stylesheet.screen#3" value="lib/style-ie6.css"/>

        <map:parameter name="theme.path" value="{global:theme-path}"/>
        <map:parameter name="theme.name" value="{global:theme-name}"/>
      </map:transform>
    </map:when>
  </map:select>
</map:match>
```

CSS Rules

The syntax or rules for CSS is different than that of (X)HTML markup.

Though it is not too confusing, once you take a look at it. It consists of only 3 parts.

```
selector {property: value}
```

The selector is the (X)HTML element that you want to style. The property is the actual property title, and the value is the style you apply to that property

style tier

Coding with style tier

CSS Rules

Each selector can have multiple properties, and each property within that selector can have independent values. The property and value are separated with a colon and contained within curly brackets. Multiple properties are separated by a semi colon. Multiple values within a property are separated by commas, and if an individual value contains more than one word you surround it with quotation marks. As shown below.

```
body {  
    font-family: "Trebuchet MS", Arial, Helvetica, sans-serif;  
    font-size: .8em;  
    text-align: center;
```

I. CSS Classes

The '.' denotes a class

.larger is the class 'larger'

- A rule for the class 'larger' would look like this:

```
.larger {  
  font-size:24pt;  
}
```

- We would reference this class in HTML like this:

```
<p class="larger">some text</p>
```

2. CSS IDs

IDs are similar to Classes

The '#' denotes an id

main is the id 'main'

- A rule for the id 'main' would look like this:

```
# main {  
  font-size: 16pt;  
  background-color: gray;  
}
```

- We would reference this class in HTML like this

`<div id="main">some text</div>`

There is much more to CSS on

1. <http://reference.sitepoint.com/css>
2. www.csszengarden.com/
3. www.w3schools.com/css/

PART-2 Hands-on

Configuring Manakin Themes

Customizing the 'Reference' theme

- ✓ Start Tomcat Service
- ✓ Download Firefox 3.5. X from mozilla.com
and Start the Firefox web browser
- ✓ Download the Firebug from getfirebug.com
and Install the firebug plug-in (Click “inspect” then point to elements)
- ✓ Turn to <http://localhost/xmlui>

Configuring Manakin Themes

Customizing the 'Reference' theme

I. Replace default Manakin 'logo'

1. Place your 'logo' image into (\themes\Reference\images) directory
2. Start the editor and open the CSS file
{Reference/lib/style.css}
3. Return to Firefox, enable Firebug's "Inspect" feature, and point to the Manakin logo
4. Return to editor and sort the "Outline" pane by "Selector" and locate the `div#ds-header a span#ds-header-logo` rule
5. Use editor to change height property of
`div#ds-header a span#ds-header-logo` to *height: 100px from 80px*
6. Use the editor to change height property of `ul#ds-trail` rule to
margin-top: 100px from 80px

Configuring Manakin Themes

Customizing the 'Reference' theme

2. Redesigning the footer elements

1. Hide footer logo and text by adding new (*visibility: hidden*) property to *span#ds-footer-logo* and *div#ds-footer p* rules
2. To make the footer match our color scheme, also add a new *background-color: #9CADB F* property to *div#ds-footer* rule

3. Moving menu item from right to left

1. Use Firebug to determine which rules control the menu and body
2. Locate these rules using the editor
3. Reverse menu and body positions by switching *div#ds-body* property to *float:right* and *div#ds-options* property to *float:left*

Configuring Manakin Themes

Customizing the 'Reference' theme

4. Changing the background 'Color'

1. Reference theme uses RGB color codes in some places, and the more standard Hexadecimal codes in others
2. Use Firebug to determine color values used for original background (tan: #FFFFFF0) and border (beige: #F0F0D2) colors on right-hand ds-options menu, which will be the same colors used elsewhere in the theme
3. Use the editor to locate the RGB values listed `div.ds-option-set` rule (not `div#ds-option-set`)

Configuring Manakin Themes

Customizing the 'Reference' theme

6. Changing link color

1. Use Firebug to determine which rule controls breadcrumb links
2. Locate the rule using the editor
3. Add new property `color: #FFFFFF` to `div#ds-header` a rule
4. We can also add a hover rule add an underline when someone points to the ds- header link. We do this by creating a new rule called `div#ds-header a: hover` which has the same `color: #FFFFFF` property, but also ads the `decoration: underline` property

Configuring Manakin Themes

Customizing the 'Reference' theme

Changing in bullet color

1. Use Firebug to determine which rule controls menu bullets
2. Locate the rule using the editor
3. Change bullet color property in `div#ds-options li` to `color: #`
from `rgb(100, 100, 50)`

Configuring Manakin Themes

Applying 'Kubrick' theme

As you know A DSpace installation running Manakin may have several Themes associated with it.

Theme determines most of the page's look and feel. Different themes can be applied to different sets of DSpace pages allowing for both variety of styles between sets of pages and consistency within those sets. The `xmlui.xconf` configuration file determines which Themes are applied to which DSpace pages (see the Configuration and Customization chapter for more information on installing and configuring themes). Themes may be configured to apply to all pages of specific type, like browse-by-title, to all pages of a one particular community or collection or sets of communities and collections, and to any mix of the two. They can also be configured to apply to a single arbitrary page or handle.

Configuring Manakin Themes

Applying 'Kubrick' theme

1. Open the {xmlui.xconf} from {\dspace\config}
2. Use any editor to open /dspace/conf/xmlui.xconf (as XML document) and add the following line above the
3. Modify the theme declaration in file {xmlui.xconf}

```
<theme name="Default Kubrick Theme" regex=".*" path="Kubrick/" />
```

4. Restart Tomcat
5. View the 'kubrick' theme in your browser

DSpace/Manakin Repository

DSpace Home

Search DSpace

Enter some text in the box below to search DSpace.

Communities in DSpace

Select a community to browse its collections.

- [Top Community 1](#)
- [Top Community 2](#)

Search DSpace

 [Advanced Search](#)

Browse

All of DSpace

- > [Communities & Collections](#)
- > [By Issue Date](#)
- > [Authors](#)
- > [Titles](#)
- > [Subjects](#)

My Account

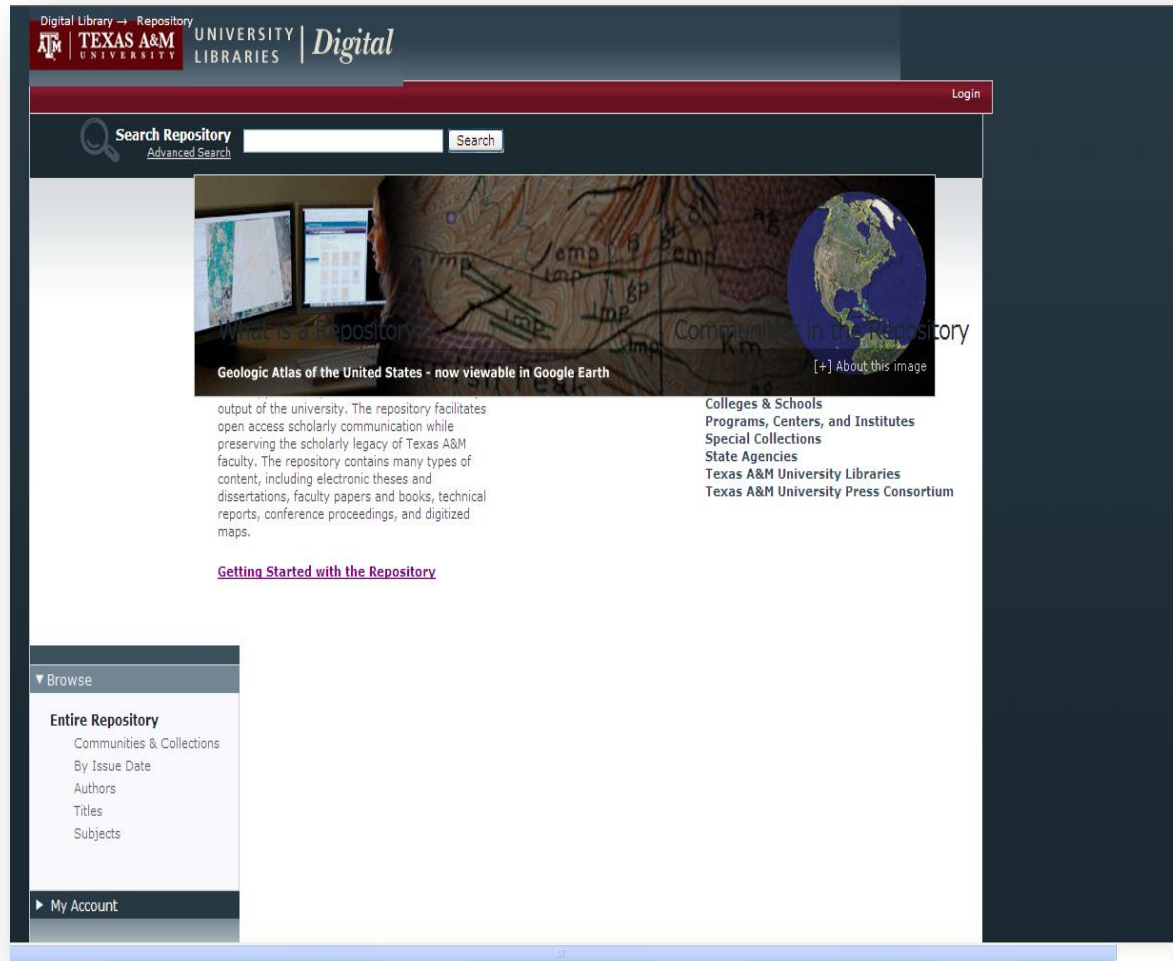
[Login](#)[Register](#)

This website is using Manakin, a new front end for DSpace created by Texas A&M University Libraries. The interface can be extensively modified through Manakin Aspects and Themes. For more information you may visit <http://di.tamu.edu> and <http://dspace.org>

[Contact Us](#) | [Send Feedback](#)

Advanced Customization - (xmlui Interface)

Texas A & M Repository



Further Reading

1. **Luhrs, Eric**: Digital Initiatives Librarian, Lafayette College Technical and Conceptual Overview of Dspace and Manakin
2. **Diggory, Mark**: Learning to use Manakin For DSpace 1.5, JA-SIG, Spring 2008 Conference, St. Paul, Minnesota, April 28-30, 2008
3. **Phillips, Scott** : Manakin Workshop DSpace User Group, February 2006