

Learning to use Manakin For DSpace 1.5

JA-SIG
Spring 2008 Conference
St. Paul, Minnesota
April 28-30, 2008

The logo for JA-SIG, featuring the text "JA-SIG" in a bold, blue, sans-serif font. The "A" has a small orange dot above it. The logo is set against a white background with a faint grid pattern and is enclosed in a black rectangular border.

JA-SIG

Mark Diggory



Slide Show generously
provided for limited tutorial
reuse by:

Scott Phillips
Research & Development Coordinator
Texas Digital Library.

The logo for JASIG (Association of Academic and Special Libraries) features the text "JASIG" in a bold, blue, sans-serif font. A small orange square is positioned between the "A" and "S". The logo is set against a white background with a faint grid pattern and is enclosed in a black rectangular border.

JASIG



Outline

1. Manakin
2. Architecture Overview
3. Style Tier
4. Introduction to XSL
5. Theme Tier

Manakin

1

What is Manakin?

- ▶ Interface framework
 - *Modular*
 - *Extendable*
 - *Tiered*
- ▶ A new interface to DSpace

What can Manakin do?

- ▶ Modify Look-and-Feel
- ▶ Brand Content
- ▶ Visualize Metadata
- ▶ Share Extensions

Look & Feel

▶ Style

▶ Integration

The screenshot displays the DSpace website interface for the DSpace User Group Meeting 2007. The header features the DSPACE logo and the event title, along with a navigation bar containing 'DSpace Home' and a 'Login' link. The main content area is titled 'Browsing by Author' and includes a search bar with a 'Go' button and a 'Advanced Search' link. Below the search bar, there are options for 'Order' (set to 'ascending') and 'Results' (set to '20'), with an 'Update' button. A status bar indicates 'Now showing items 1-20 of 127' and a 'Next Page' link. The central part of the page is a list of authors' names, each with a blue underlined link. The list includes: Acosta Sanchez, David; Adeveve, Adedeji Ayoola; Ahr, Wayne M.; Arana, Mario J.; Banerjee, Sanjay; Baxi, Asit Nareshchandra; Bayley, Hagan; Bettati, Riccardo; Blasingame, Thomas A.; Bomba, Michael Stephen; Bonneson, James; Briggle, Justin David; Brodbelt, Jennifer S.; Burns, Shannon Naomi, 1978-; Carroll, Raymond J.; Chen, Hamn-Ching; Chen, Hung-ming; Chowdhary, Bhanu; Cifuentes, Lauren D.; and Clark, William Bedford. A second status bar at the bottom of the list shows 'Now showing items 1-20 of 127' and a 'Next Page' link. On the right side, there are two sidebar sections: 'Search DSpace' with a search input field and a 'Go' button, and 'Browse' with a list of navigation links: 'All of DSpace', 'Communities & Collections', 'Subjects', 'Titles', 'Authors', and 'By Issue Date'. Below these is the 'My Account' section with links for 'Login' and 'Register'. At the bottom of the page, there is a footer with the text 'This is a DSpace User Group tutorial theme to showcase a few examples of theme design.' and a 'Contact Us | Send Feedback' link.

DSpace User Group Meeting 2007

DSpace Home

Browsing by Author

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Or enter first few letters:

Order: ascending Results: 20

Now showing items 1-20 of 127 [Next Page](#)

Authors Name

- [Acosta Sanchez, David](#)
- [Adeveve, Adedeji Ayoola](#)
- [Ahr, Wayne M.](#)
- [Arana, Mario J.](#)
- [Banerjee, Sanjay](#)
- [Baxi, Asit Nareshchandra](#)
- [Bayley, Hagan](#)
- [Bettati, Riccardo](#)
- [Blasingame, Thomas A.](#)
- [Bomba, Michael Stephen](#)
- [Bonneson, James](#)
- [Briggle, Justin David](#)
- [Brodbelt, Jennifer S.](#)
- [Burns, Shannon Naomi, 1978-](#)
- [Carroll, Raymond J.](#)
- [Chen, Hamn-Ching](#)
- [Chen, Hung-ming](#)
- [Chowdhary, Bhanu](#)
- [Cifuentes, Lauren D.](#)
- [Clark, William Bedford](#)

Now showing items 1-20 of 127 [Next Page](#)

This is a DSpace User Group tutorial theme to showcase a few examples of theme design.

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

Branding

- ▶ Repository
- ▶ Communities
- ▶ Collections
- ▶ Items

Browse By Title

[A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

Or enter the first few letters:

Now showing items 41-51 of 4046

[Previous Page](#)

[Next Page](#)



Adaptive protocols for mobile ad hoc networks

Holland, Gavin Douglas, 1966-, Ph. D., Texas A&M University (December 2004)

[Full Text](#) [Citation](#)



Adaptive responses of central cholinergic systems in transgenic mice

Hartmann, Joachim, Doctor of Philosophy, Texas Tech University (2006-07-14)

[Full Text](#) [Citation](#)



Adaptive run-to-run control of overlay in semiconductor manufacturing [electronic resource]

Martinez, Victor Manuel., Ph. D., The University of Texas at Austin (2002)

[Full Text](#) [Citation](#)



An adaptive tabu search approach to cutting and packing problems [electronic resource]

Harwig, John Michael., Ph. D., The University of Texas at Austin (2003)

[Full Text](#) [Citation](#)



Adaptive tool selection strategies for drilling in flexible manufacturing systems

Chander, Karthik Balachandran, M. S., Texas A&M University (May 2004)

[Full Text](#) [Citation](#)



Addressing spatial complexities in residential location choice models [electronic resource]

Guo, Jessica Yinqhchieh., Ph. D., The University of Texas at Austin (2004)

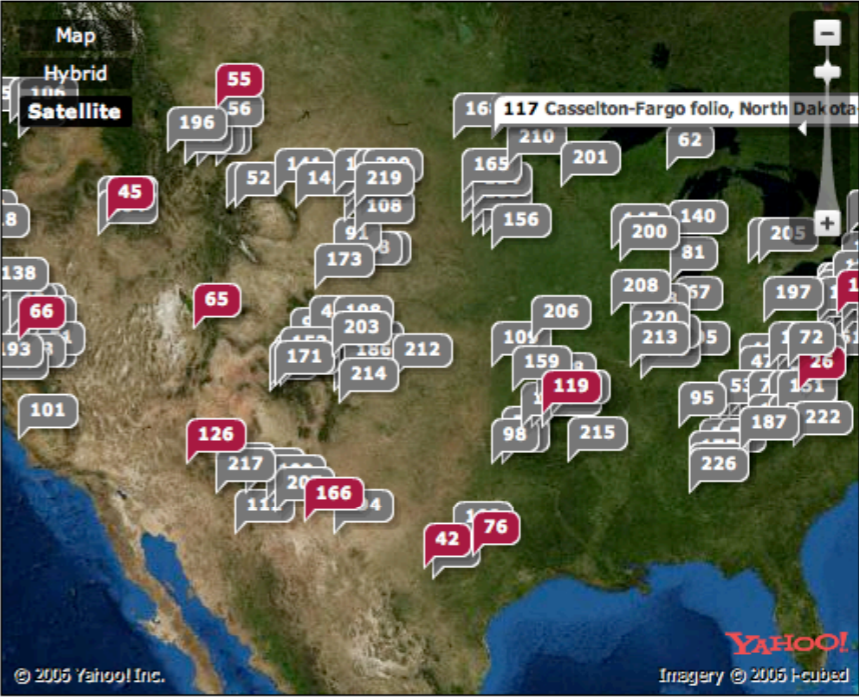
Visualization

- ▶ Interpret metadata
- ▶ Link metadata
- ▶ Explain metadata

Texas A&M University *digital* REPOSITORY Login

U Digital Repository → Texas A&M University Libraries → Geologic Atlas of the United States

Map
Hybrid
Satellite



117 Casselton-Fargo folio, North Dakota

© 2005 Yahoo! Inc. Imagery © 2005 F-cubed

The Geologic Atlas of the United States

Recent Submissions

[Fort Benton folio, Montana](#)
Weed, Walter Harvey, 1862-1944 (1899)

[El Paso folio, Texas](#)
Richardson, G. B. (George Burr), 1872-1949 (1909)

[Coos Bay folio, Oregon](#)
Diller, J. S. (Joseph Silas). b. 1850 (1901)

Share

- ▶ Extend
- ▶ Adapt
- ▶ Customize

The screenshot displays the Texas Digital Library website interface. At the top, the logo features a star with the letters 'A' and 'M' inside, followed by the text 'TEXAS DIGITAL LIBRARY'. Below the logo is a navigation bar with links for 'Home > Repository > Theses and Dissertations', and a menu with 'ABOUT', 'PROJECTS', 'SERVICES', 'NEWS', and 'CONTACT US'. The main heading is 'Theses and Dissertations'. A search filter section includes fields for 'Words in text:', 'Author:', 'Committee Chair:', 'Degree Level:' (with a dropdown menu showing 'All', 'Masters', 'Doctoral', 'University of Texas', and 'Texas Tech University'), 'Granting Institution:', and 'Year:' (with a dropdown menu showing 'All', '2006', '2005', and '2004'). A 'Go' button is located below the search filters. To the right of the search filters, there is a disclaimer: 'For uses beyond applicable copyright license agreement, it is the user's responsibility to secure permission from the copyright owner. Please consult the copyright statement on the university's collection or contact the granting institution for further information.' Below the disclaimer is a section titled 'Collections in this community' with three bullet points: 'Texas A&M University at College Station', 'Texas Tech University at Lubbock', and 'University of Texas at Austin'. The 'Recent Submissions' section lists three entries, each with a small 'ATM' logo, a title, author information, and a date. The first entry is 'Measuring total longshore sediment transport with a LISST instrumented mini-s... Huchzermeyer, Erick Karl, 1974-, M. S., Texas A&M University (December 2005)' with links for 'Full Text' and 'Citation'. The second entry is 'Design and synthesis of novel isoelectric buffers Lalwani, Sanjiv Kumar Shankerdass, 1977-, Ph. D., Texas A&M University (Aug...)' with links for 'Full Text' and 'Citation'. The third entry is 'Spatial pattern and temporal dynamics of northern bobwhite abundance and ag... landuse, and potential casual factors'.

Manakin around the globe

▶ Texas Digital Library

- <http://repositories.tdl.org/>

▶ GeoFolios @ A&M

- <http://labs.di.tamu.edu:8080/geofolios/handle/123456789/2>

▶ Dome @ MIT

- <http://dome.mit.edu/>

▶ Instituto Antio Jobim

- <http://www.jobim.org/manakin/>

▶ University of Helsinki

- <http://tds.terkko.helsinki.fi/>

Manakin vs JSP UI

▶ JSP UI

- *Difficult & expensive to extend*
- *One monolithic interface for all collections regardless of content*

▶ Manakin

- *Modular design makes extensions easier*
- *Multiple interfaces that can adapt to the needs of a collection*
- *Metadata in native formats*

Tiers

1. Style Tier

- Create simple themes
 - XHTML + CSS
-

2. Theme Tier

- Create complex themes
 - XSL + XHTML + CSS
-

3. Aspect Tier

- Add new features
- Cocoon + Java

What resources are available?

- ▶ Documentation
 - DSpace Manual
 - Theme Writing Tutorial
 - DSpace Wiki
- ▶ Mailing lists
 - dspace-dev
 - dspace-tech

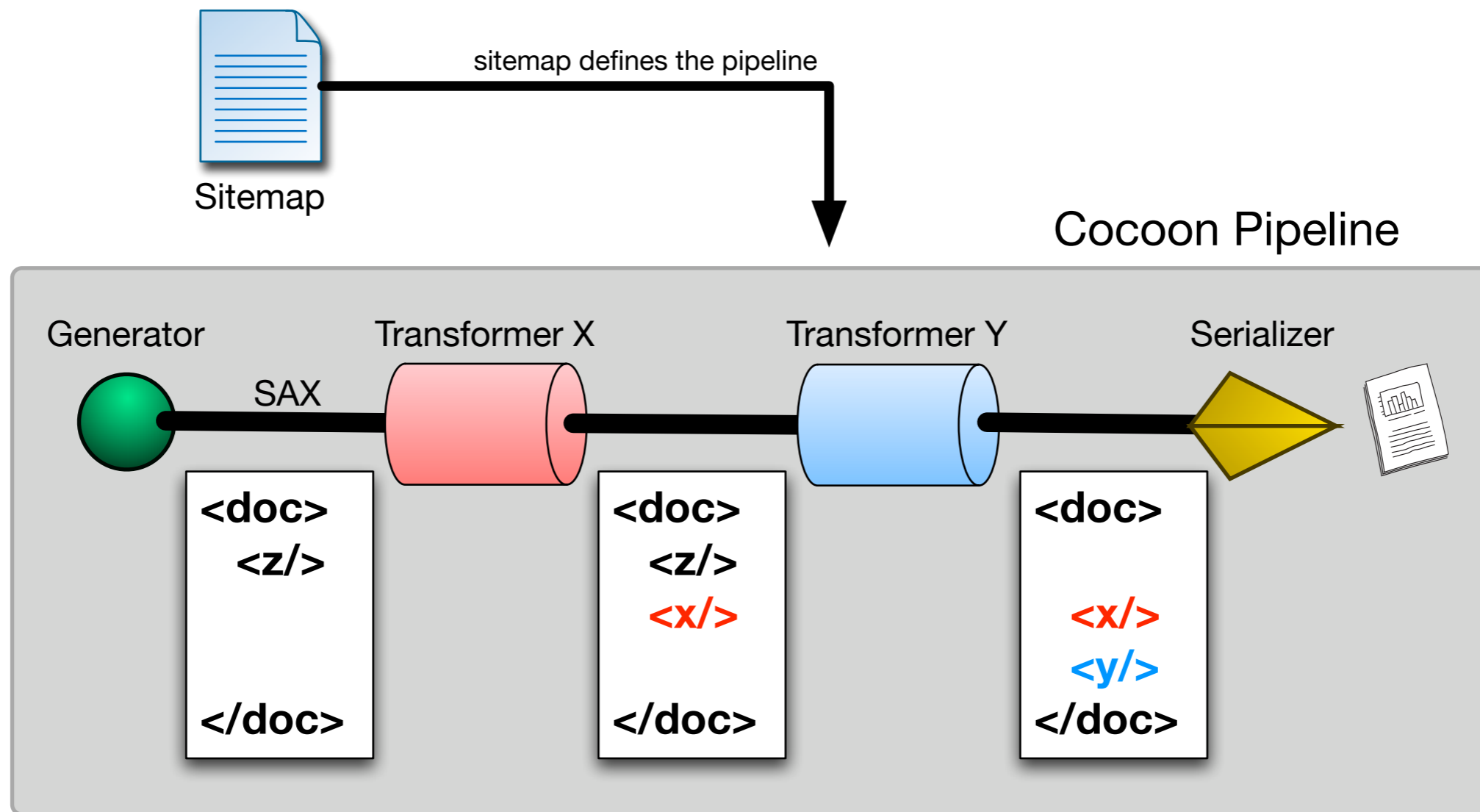
Architecture Overview

2

Apache Cocoon

- ▶ Web development framework
- ▶ Pipeline-based architecture
- ▶ SAX-based XML

- ▶ Modular components
 - Generators
 - Transformers
 - Serializers

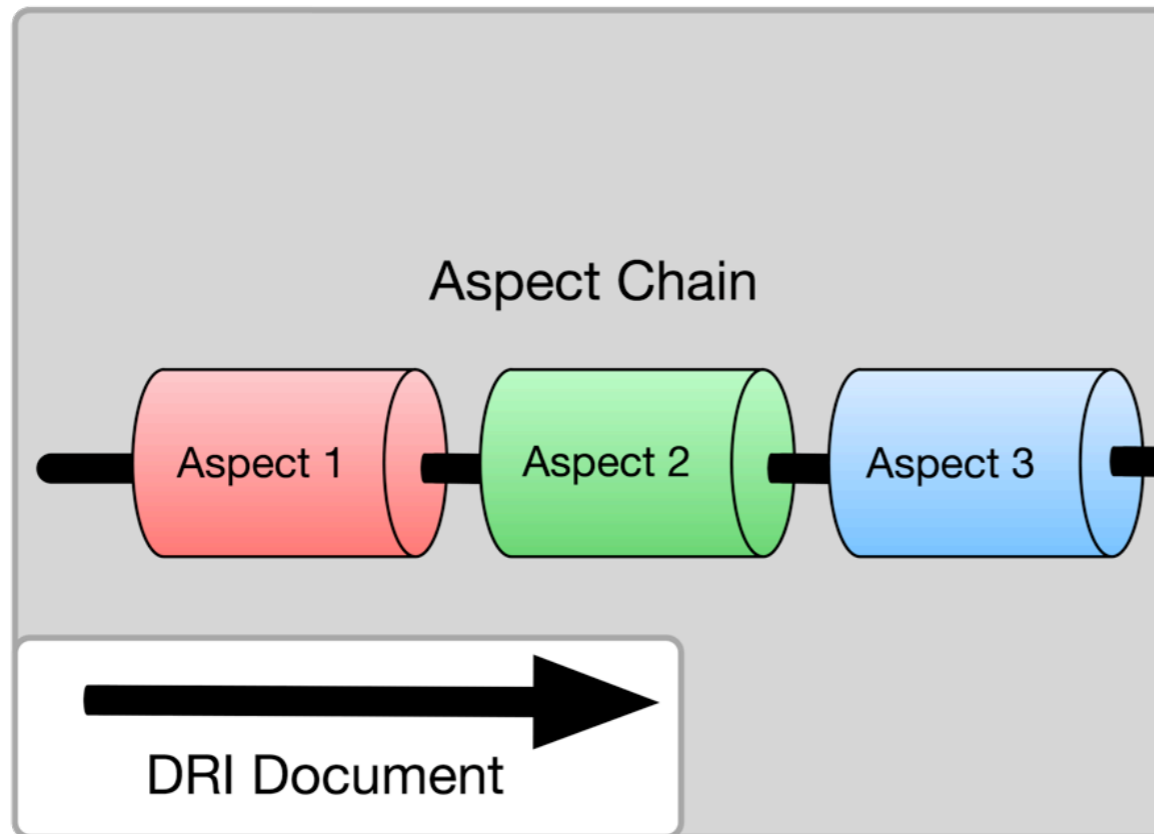


Cocoon's Pipeline Model

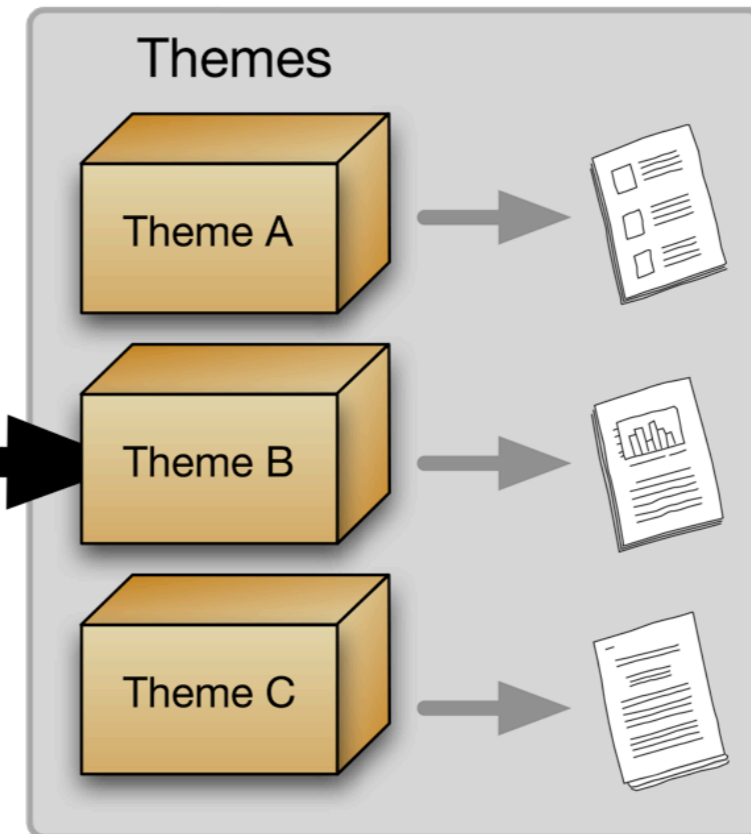
Three components

- ▶ Aspects
- ▶ Themes
- ▶ DRI Schema

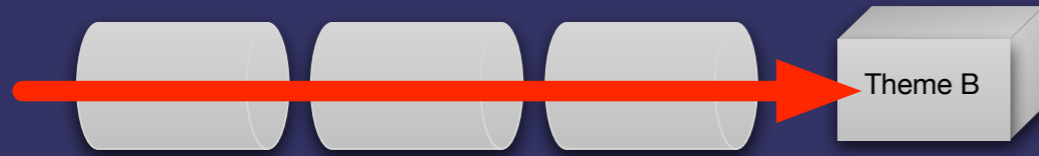
Content Generation



Style Application



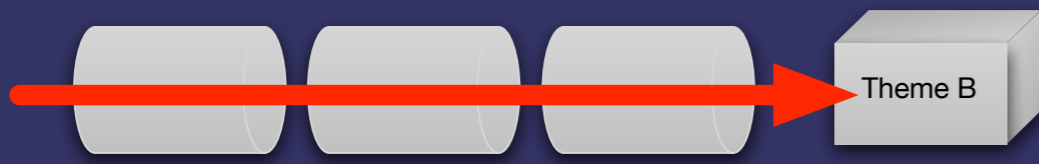
Structural overview



DRI Schema

*Abstract representation
of a repository page*

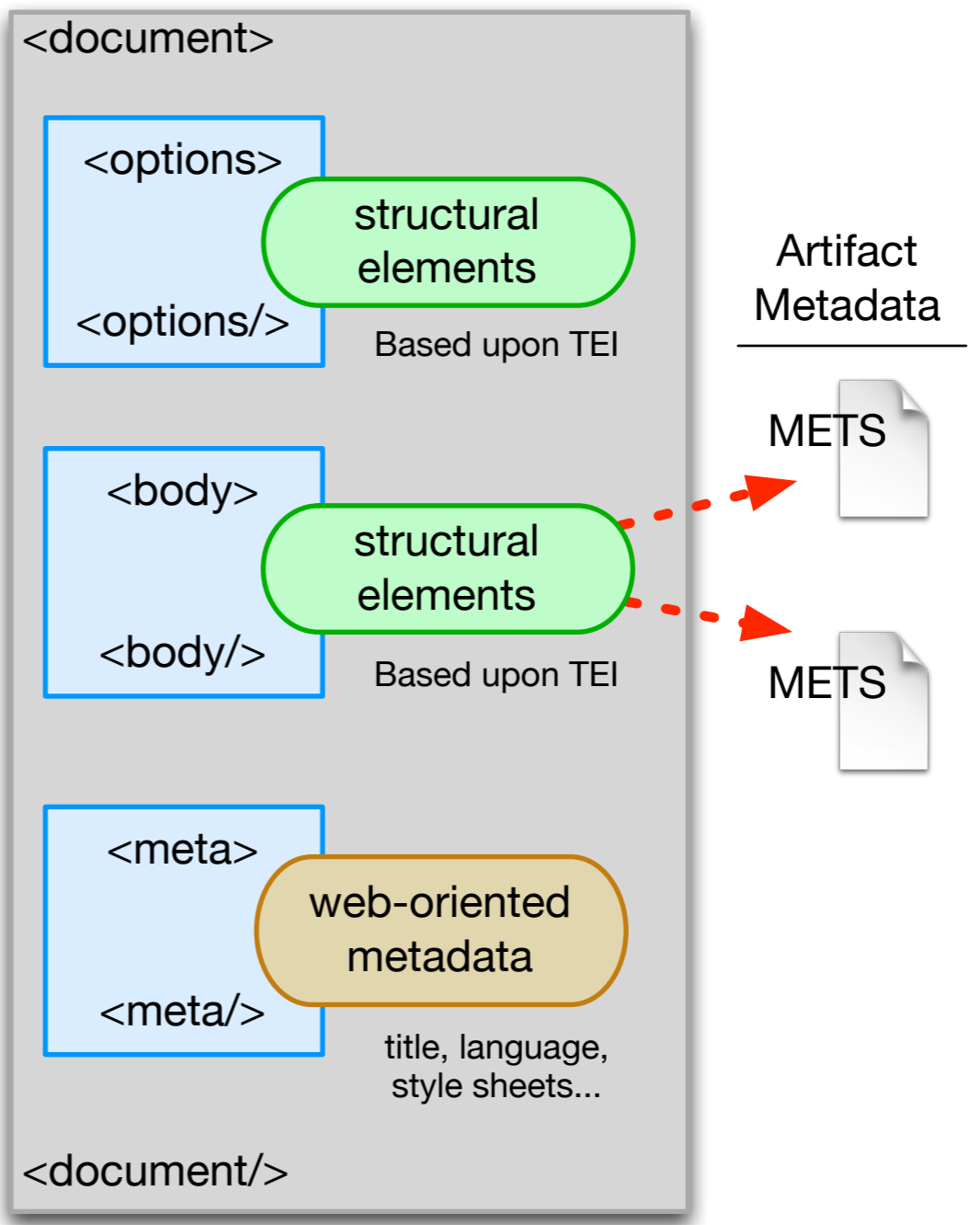
- ▶ **D**igital **R**epository **I**nterface
- ▶ Metadata elements
 - References to METS
 - DIM, DC, QDC, extendable to others
- ▶ Structural elements
 - TEI (light)
- ▶ Changes 1.1 -> 1.5

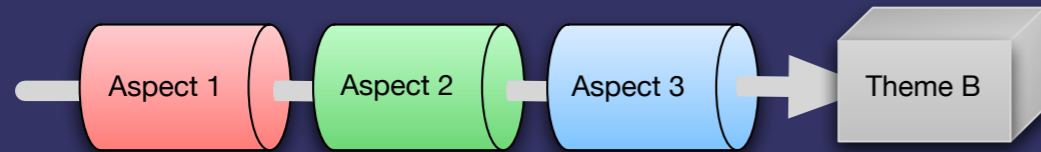


DRI Schema

*Abstract representation
of a repository page*

DRI Document

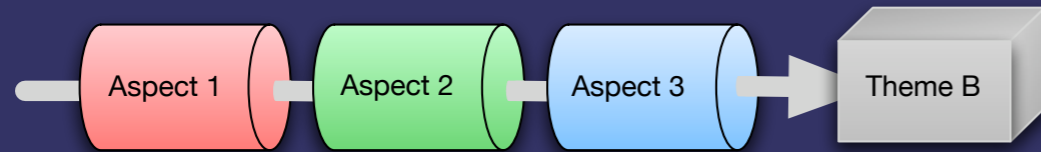




Aspects

*Implement a set of
related features*

- ▶ Applied to **all** pages
- ▶ Interact with the repository
- ▶ “Aspect Chain”
 - Input DRI
 - Output DRI



Aspects

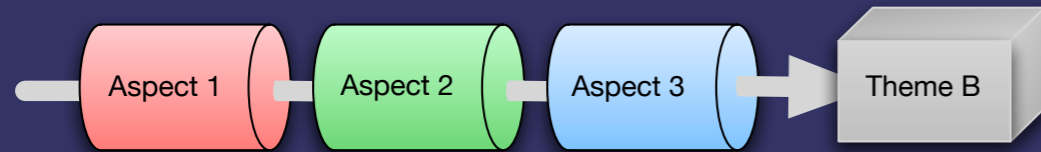
*Implement a set of
related features*

▶ Core Aspects:

- Artifact Browser
- E-Person
- Submission
- Administrative

▶ Possibilities:

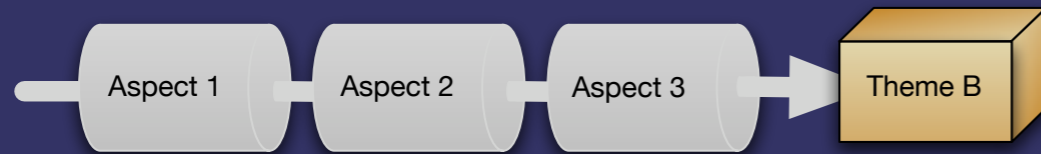
- Shopping cart
- Specialized searching
- Customized workflow



Aspects

*Implement a set of
related features*

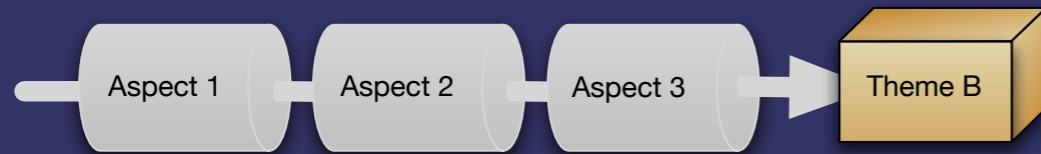
- ▶ Self contained packages
 - Java source code
 - Javascript flow scripts
 - XML Configuration



Themes

Stylize content into a particular look-and-feel

- ▶ Defines how the repository looks
- ▶ May apply to:
 - A Single page
 - All pages in a collection
 - All pages in a community
 - The whole repository



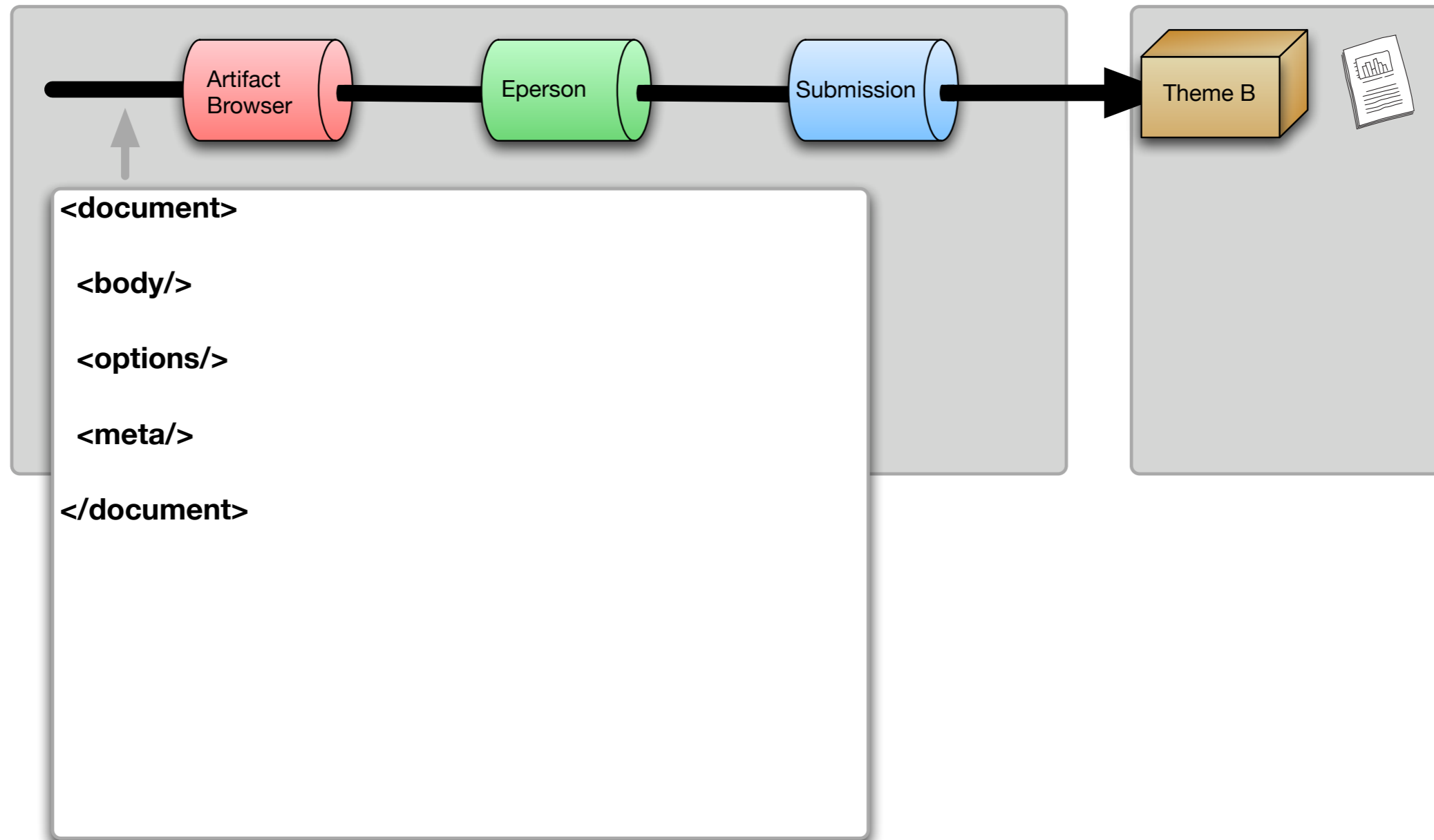
Themes

Stylize content into a particular look-and-feel

- ▶ Self contained packages
 - XSL stylesheets
 - CSS stylesheets
 - Images
 - Static resources

Content Generation

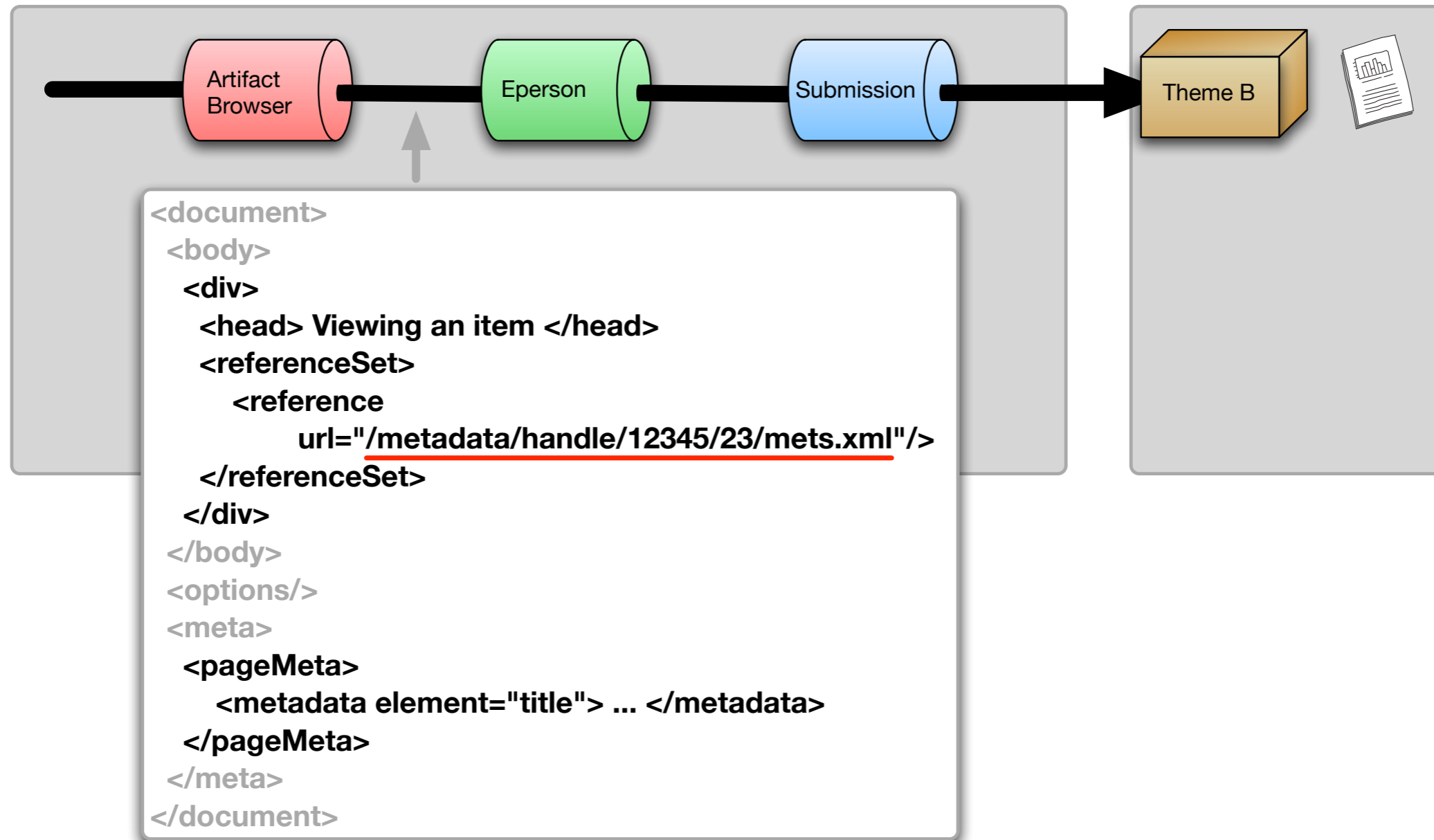
Style Application



Putting it all together

Content Generation

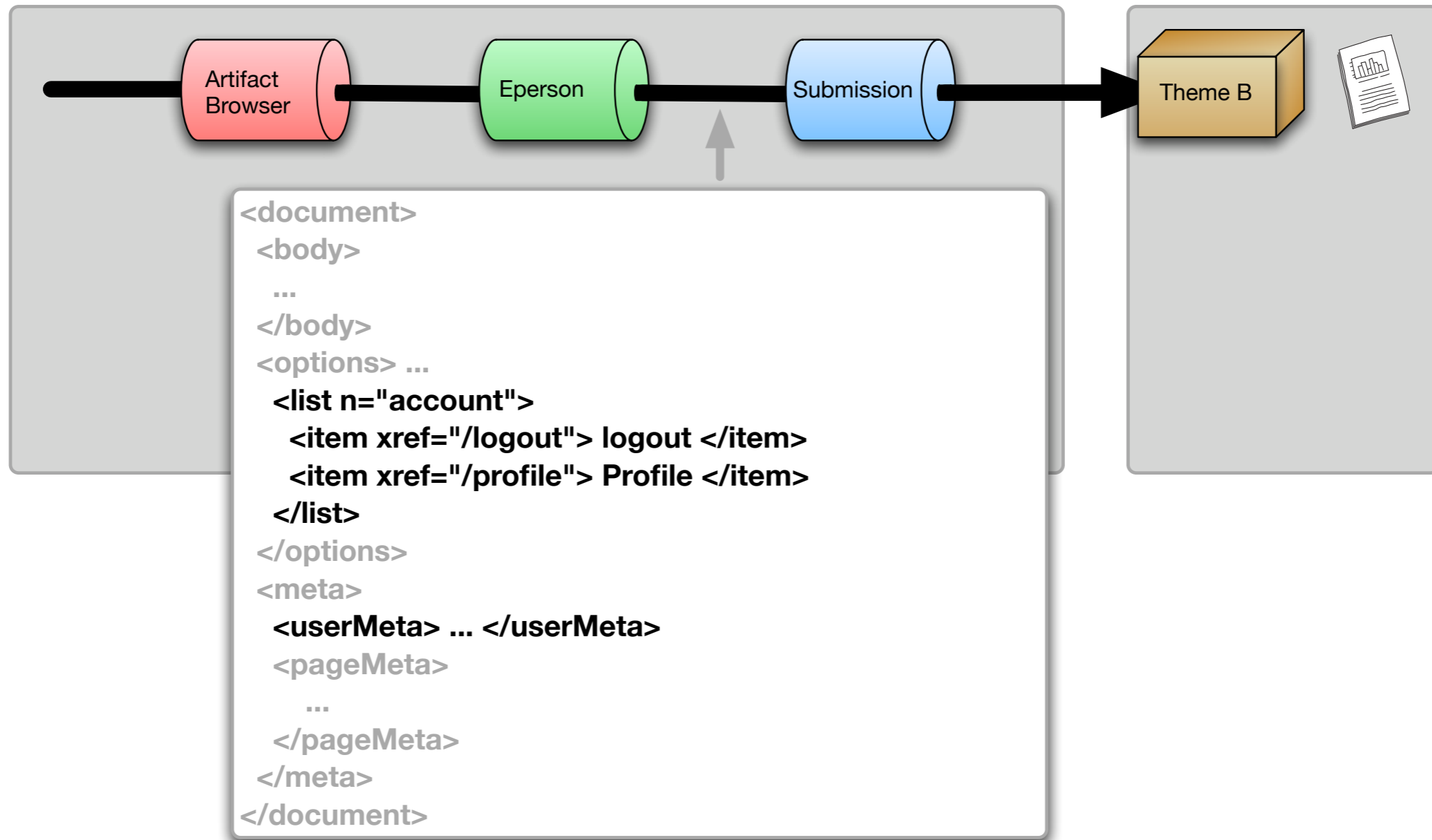
Style Application



Putting it all together

Content Generation

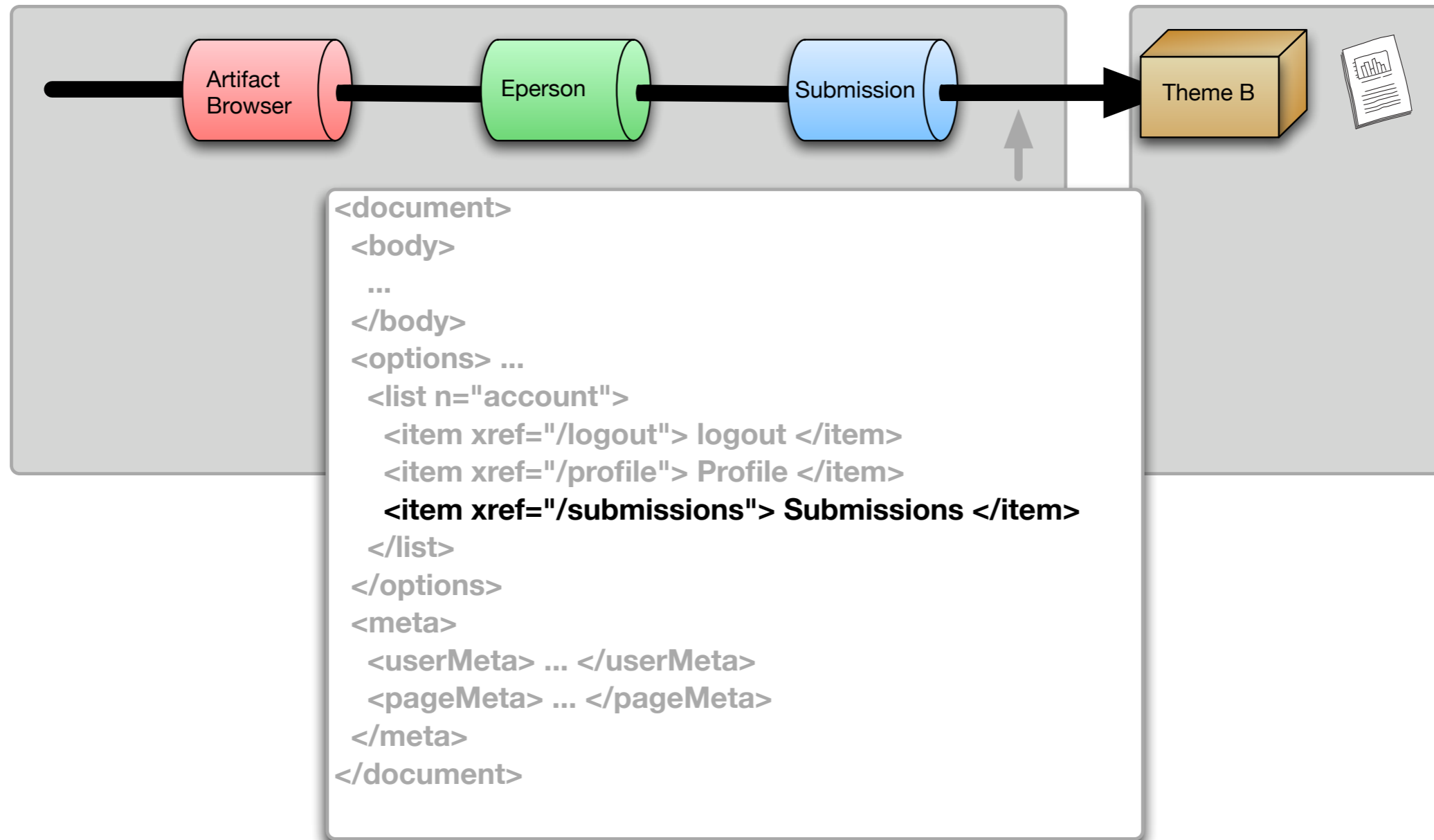
Style Application



Putting it all together

Content Generation

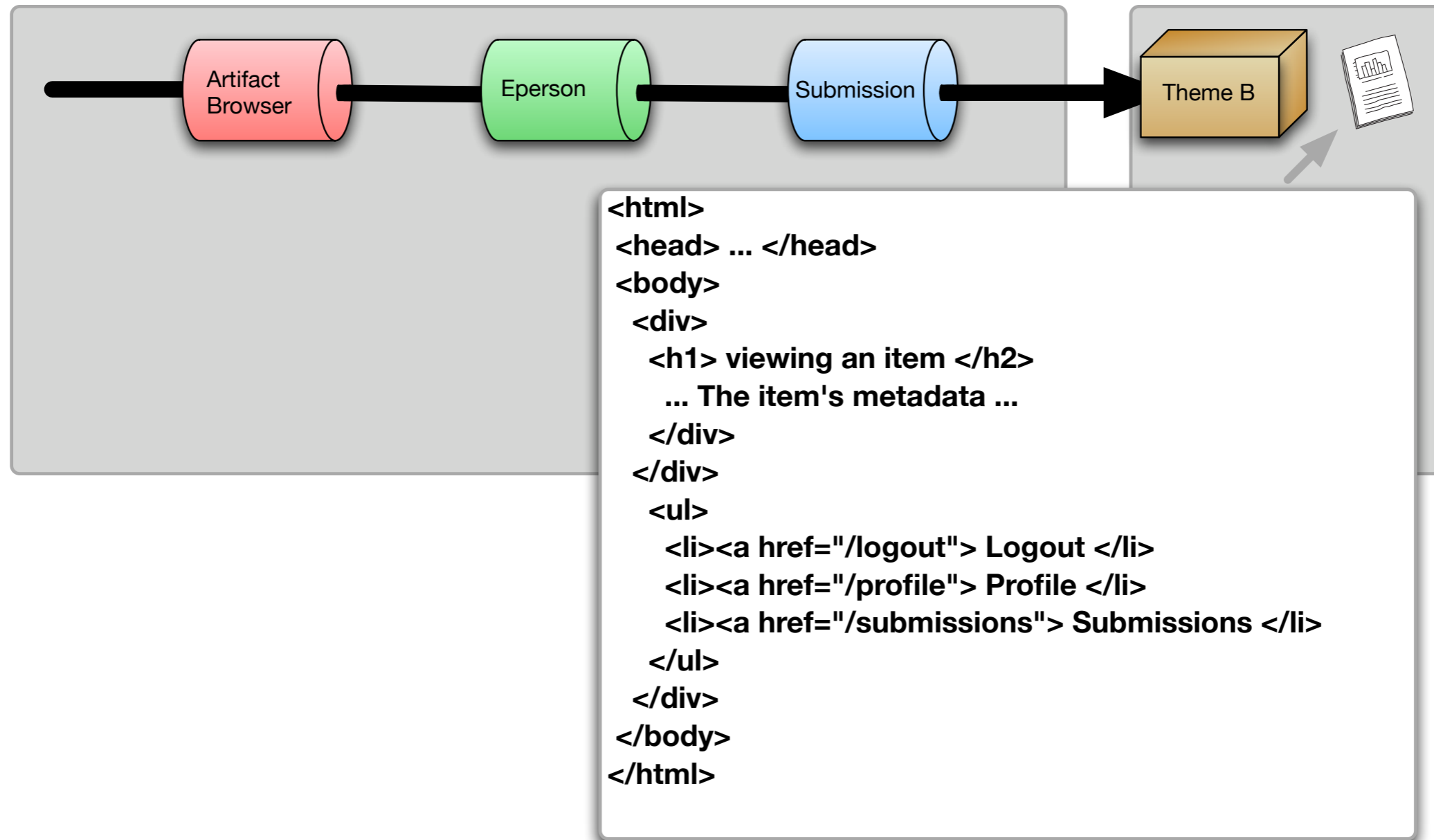
Style Application



Putting it all together

Content Generation

Style Application



Putting it all together

Style Tier

3

Tiers

1. Style Tier

- **XHTML + CSS**
 - **Create simple themes**
-

2. Theme Tier

- XSL + XHTML + CSS
 - Create complex themes
-

3. Aspect Tier

- Cocoon + Java
- Add new features

Create a theme

1. Create theme skeleton

- `cd [dspace-source]/dspace/modules/dspace-xmlui/src/main/webapp/themes/`
- `cp -R [dspace-source]/dspace/dspace-xmlui/dspace-xmlui-webapp/src/main/webapp/themes/template/ [theme-dir]`

2. Modify theme variables

- `[theme-dir]/sitemap.xmap`

```
<global-variables>  
  <theme-path>[theme-dir]</theme-path>  
  <theme-name>[your-name]</theme-name>  
</global-variables>
```

Create a theme

3. Add your CSS stylesheet

- `[theme-dir]/style.css`
- `[theme-dir]/style-ie.css`

4. Rebuild your project

- `cd [dspace-source]/dspace/; mvn package`
- Deploy web application

Install a theme

1. Open XMLUI configuration
 - [dspace]/config/xmlui.xconf
2. Add a new theme rule

```
<theme name="[theme-name]"  
       path="[theme-dir]"  
       handle="123/1"           />
```

or

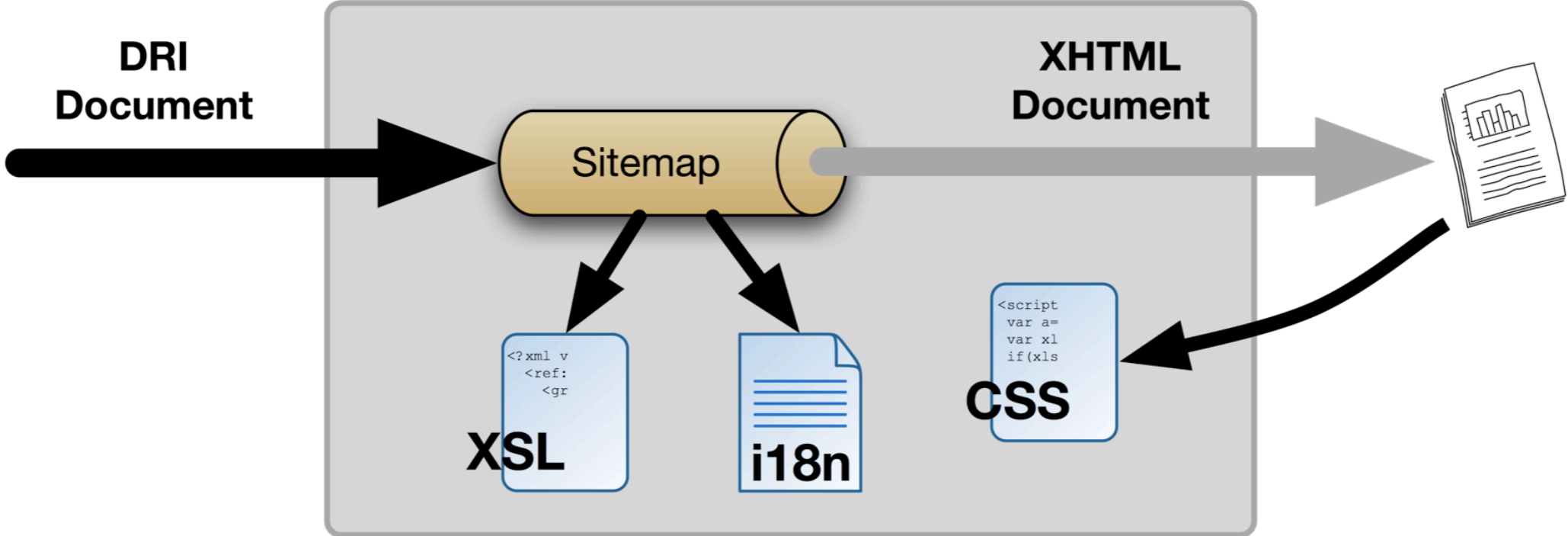
```
<theme name="[theme-name]"  
       path="[theme-dir]"  
       regex=".*"             />
```

3. Restart Tomcat

Theme components

- ▶ Sitemap
 - The heart of a theme
 - A configuration file
 - References components
- ▶ XSL
 - Converts DRI to HTML
- ▶ CSS
 - Styles the resulting HTML

Your Theme



Theme components

```
<sitemap>
  <pipelines>

    <!-- Theme variables -->
    <component-configurations>
      ....
    </component-configurations>

    <pipeline>

      <!-- Static content -->
      <match pattern="themes/*/**">
        <read src="{2}"/>
      </match>

      <!-- Aspect content -->
      <match pattern="**">

        ....

      </match>
    </pipeline>
  </pipelines>
</sitemap>
```

Sitemap details

```
<sitemap>
  <pipelines>
    <!-- Theme variables -->
    <component-configurations>
      ....
    </component-configurations>
    <pipeline>

      <!-- Static content -->
      <match pattern="themes/*/**">
        <read src="{2}"/>
      </match>

      <!-- Aspect content -->
      <match pattern="**">

        ....

      </match>
    </pipeline>
  </pipelines>
</sitemap>
```

Sitemap details


```
<sitemap>
  <pipelines>

    <!-- Theme variables -->
    <component-configuration
      ....
    </component-configuration>


    <pipeline>

      <!-- Static content -->
      <match pattern="themes/*/**">
        <read src="{2}"/>
      </match>

      <!-- Aspect content -->
      <match pattern="**">

        ....

      </match>
    </pipeline>
  </pipelines>
</sitemap>
```



```
<component-configurations>
  <global-variables>
    <theme-path>template</theme-path>
    <theme-name>The template theme</theme-name>
  </global-variables>
</component-configurations>
```

Sitemap details

```
<sitemap>
  <pipelines>

    <!-- Theme variables -->
    <component-configurations>
      ....
    </component-configurations>

    <pipeline>

      <!-- Static content -->
      <match pattern="themes/*/**">
        <read src="{2}"/>
      </match>

      <!-- Aspect content -->
      <match pattern="**">

        ....

      </match>
    </pipeline>
  </pipelines>
</sitemap>
```

Sitemap details

```
<sitemap>
  <pipelines>

    <!-- Theme variables -->
    <component-configurations>
      ....
    </component-configurations>

    <pipeline>

      <!-- Static content -->
      <match pattern="themes/*/**">
        <read src="{2}"/>
      </match>

      <!-- Aspect content -->
      <match pattern="**">
        ....
      </match>
    </pipeline>
  </pipelines>
</sitemap>
```

Sitemap details

```

<sitemap>
  <pipelines>

    <!-- Theme variables -->
    <component-configuration>
      ....
    </component-configuration>

    <pipeline>

      <!-- Static content -->
      <match pattern="the"
        <read src="{2}"
      </match>

      <!-- Aspect content -->
      <match pattern="**"
        ....
      </match>
    </pipeline>
  </pipelines>
</sitemap>

```

```

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

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

      <parameter name="theme.path" value="{global:theme-path}"/>
      <parameter name="theme.name" value="{global:theme-name}"/>
    </transform>
  </when>
  <otherwise>
    <transform type="IncludePageMeta">
      <parameter name="stylesheet.screen" value="style.css"/>

      <parameter name="theme.path" value="{global:theme-path}"/>
      <parameter name="theme.name" value="{global:theme-name}"/>
    </transform>
  </otherwise>
</select>

```

Sitemap details

```

<sitemap>
  <pipelines>

    <!-- Theme variables -->
    <component-configuration>
      ....
    </component-configuration>

    <pipeline>

      <!-- Static content -->
      <match pattern="the"
        <read src="{2}"
      </match>

      <!-- Aspect content -->
      <match pattern="**"
        ....
      </match>
    </pipeline>
  </pipelines>
</sitemap>

```

```


<!-- Debugging output -->
<match type="request" pattern="XML">
  <serialize type="xml"/>
</match>

<!-- Step 3: Transform to XHTML -->
<transform src="template.xsl"/>

<!-- Step 4: Localize the page -->
<act type="locale">
  <transform type="i18n">
    <parameter name="locale" value="{locale}"/>
  </transform>
</act>

<!-- Step 5: Serialize to the browser -->
<serialize type="xhtml"/>

```



Sitemap details

```
<sitemap>
  <pipelines>

    <!-- Theme variables -->
    <component-configurations>
      ....
    </component-configurations>

    <pipeline>

      <!-- Static content -->
      <match pattern="themes/*/**">
        <read src="{2}"/>
      </match>

      <!-- Aspect content -->
      <match pattern="**">

        ....

      </match>
    </pipeline>
  </pipelines>
</sitemap>
```

Sitemap details

A Closer Look

Let us pause at this point and take a closer look at ...

- The theme's sitemap.xmap
- xmlui.xconf configuration



Introduction to XSL

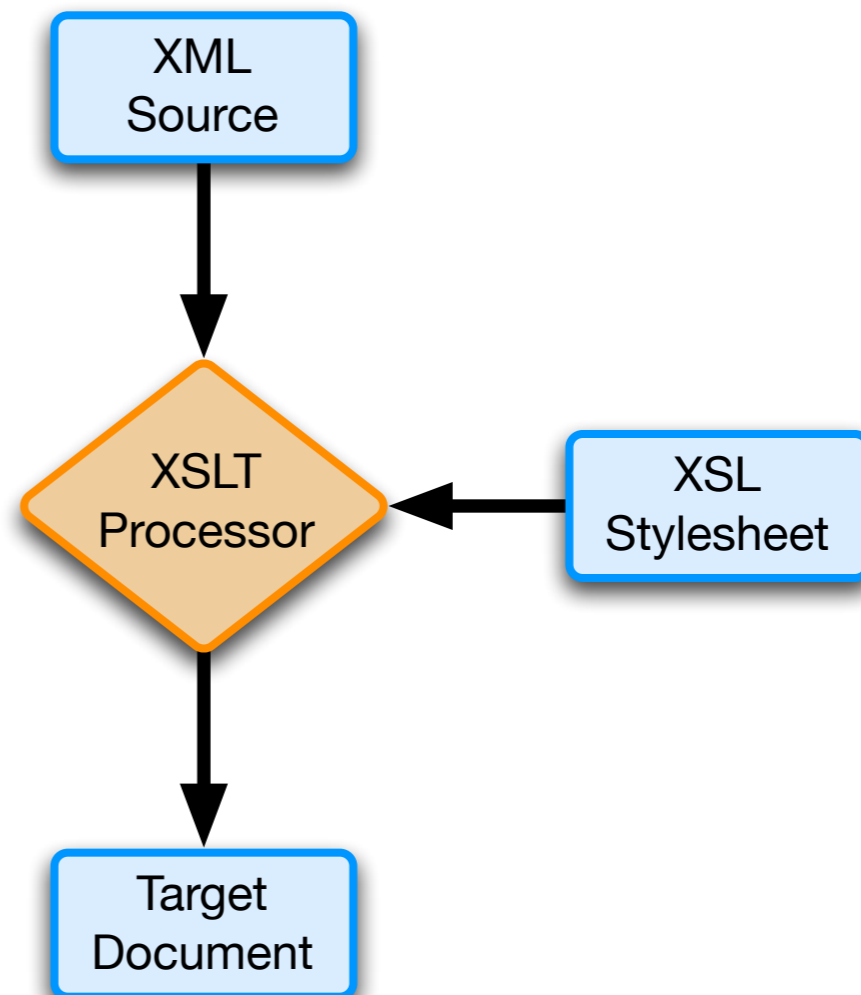
4

What is XSL?

- ▶ e**X**tensible **S**tylesheet Language
- ▶ Transform XML documents into new XML documents
- ▶ XSL is encoded in XML
- ▶ XSL officially adopted by W3C

XSL architecture

- ▶ Blue = XML Document
- ▶ Orange = Software
- ▶ Changing the stylesheet will produce a different target document

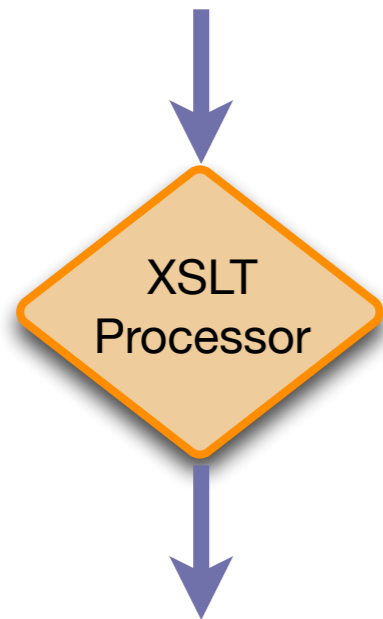


Templates

- ▶ Match patterns
 - Until all source elements are processed
- ▶ Produce XML fragments
- ▶ All templates together produce the target XML document

Source Document (DRI)

```
<figure source="/images/logo.png">  
  My university logo  
</figure>
```



XSL Stylesheet (XSL)

```
<xsl:template match="figure">  
    
</xsl:template>
```

Target Document (HTML)

```

```

Example 1 (architecture)

Source Document (DRI)

```
<figure source="/images/logo.png" target="http://my.university.edu/">  
  My university logo  
</figure>
```



Target Document (HTML)

```
<a href="http://my.university.edu/">  
    
</a>
```

Example 2 (templates)

XSL Stylesheet (XSL)

```
<xsl:template match="figure">
```

```
  <xsl:if test="@target">
    <a href="{@target}">
      
    </a>
  </xsl:if>
```

} Target case, image
with a hyperlink

```
  <xsl:if test="not(@target)">
    
  </xsl:if>
```

} Normal case,
just an image

```
</xsl:template>
```

Example 2 (templates)

Template selection

- ▶ Each template handles a specific element
- ▶ Match rules used to determine which template is applied
- ▶ `<apply-templates/>` finds the next template to match

XSL Stylesheet (XSL)

```
<xsl:template match="hi">  
  <span class="{@rend}">  
    <xsl:apply-templates />  
  </span>  
</xsl:template>
```

} Template for highlights:
bold, italics, underline, etc...

```
<xsl:template match="xref">  
  <a href="{@target}">  
    <xsl:apply-templates />  
  </a>  
</xsl:template>
```

} Template for hyperlinks

Example 2 (selection)

Source Document (DRI)

```
<hi rend="bold">  
  <xref target="http://my.university.edu/">  
    Click me to go to my university home page  
  </xref>  
</hi>
```



Target Document (HTML)

```
<span class="bold">  
  <a href="http://my.university.edu/">  
    Click me to go to my university home page  
  </a>  
</span>
```

Example 2 (selection)

XPath

- ▶ Syntax for addressing parts of an XML document
 - paths
 - constraints
- ▶ Relative to the root or current node
- ▶ UNIX like paths
 - /document/body/div/head
 - div/head

body/div/head

```
<body>
  <div>
    → <head>Welcome</head>
      <p>Welcome to my digital repository.</p>
      <p>Here you can browse the repository for interesting items.</p>
    </div>
    <div>
    → <head>Browse by:</head>
      <list>
        <item>Titles</item>
        <item>Authors</item>
        <item>Subjects</item>
        <item>Dates</item>
      </list>
    </div>
</body>
```

XPath examples

body/div/*

```
<body>
  <div>
    <head>Welcome</head>
    <p>Welcome to my digital repository.</p>
    <p>Here you can browse the repository for interesting items.</p>
  </div>
  <div>
    <head>Browse by:</head>
    <list>
      <item>Titles</item>
      <item>Authors</item>
      <item>Subjects</item>
      <item>Dates</item>
    </list>
  </div>
</body>
```

XPath examples

body/div[2]/list/item[1]

```
<body>
  <div>
    <head>Welcome</head>
    <p>Welcome to my digital repository.</p>
    <p>Here you can browse the repository for interesting items.</p>
  </div>
  <div>
    <head>Browse by:</head>
    <list>
      <item>Titles</item>
      <item>Authors</item>
      <item>Subjects</item>
      <item>Dates</item>
    </list>
  </div>
</body>
```



XPath examples

body/div[2]/list/item[position() = last()]

```
<body>
  <div>
    <head>Welcome</head>
    <p>Welcome to my digital repository.</p>
    <p>Here you can browse the repository for interesting items.</p>
  </div>
  <div>
    <head>Browse by:</head>
    <list>
      <item>Titles</item>
      <item>Authors</item>
      <item>Subjects</item>
      <item>Dates</item>
    </list>
  </div>
</body>
```



XPath examples


body/div[list]

```
<body>
  <div>
    <head>Welcome</head>
    <p>Welcome to my digital repository.</p>
    <p>Here you can browse the repository for interesting items.</p>
  </div>
  <div>
    <head>Browse by:</head>
    <list>
      <item>Titles</item>
      <item>Authors</item>
      <item>Subjects</item>
      <item>Dates</item>
    </list>
  </div>
</body>
```

XPath examples

body/div[list]/head/text()


```
<body>
  <div>
    <head>Welcome</head>
    <p>Welcome to my digital repository.</p>
    <p>Here you can browse the repository for interesting items.</p>
  </div>
  <div>
    <head>Browse by:</head>
    <list>
      <item>Titles</item>
      <item>Authors</item>
      <item>Subjects</item>
      <item>Dates</item>
    </list>
  </div>
</body>
```



XPath examples

body//item

```
<body>
  <div>
    <head>Welcome</head>
    <p>Welcome to my digital repository.</p>
    <p>Here you can browse the repository for interesting items.</p>
  </div>
  <div>
    <head>Browse by:</head>
    <list>
      <item>Titles</item>
      <item>Authors</item>
      <item>Subjects</item>
      <item>Dates</item>
    </list>
  </div>
</body>
```



XPath examples

//list[item/text() = "Titles"]

```
<body>
  <div>
    <head>Welcome</head>
    <p>Welcome to my digital repository.</p>
    <p>Here you can browse the repository for interesting items.</p>
  </div>
  <div>
    <head>Browse by:</head>
    <list>
      <item>Titles</item>
      <item>Authors</item>
      <item>Subjects</item>
      <item>Dates</item>
    </list>
  </div>
</body>
```

XPath examples

More Information

- <http://www.w3schools.com/> (On-line tutorials)
- <http://www.mulberrytech.com/xsl/xsl-list/> (Mailing List)
- Michael Kay. "XSLT 2nd Edition: Programmer's Reference".
Wrox; 2 edition (May 3, 2001)

Theme Tier

5

Tiers

1. Style Tier

- XHTML + CSS
 - Create simple themes
-

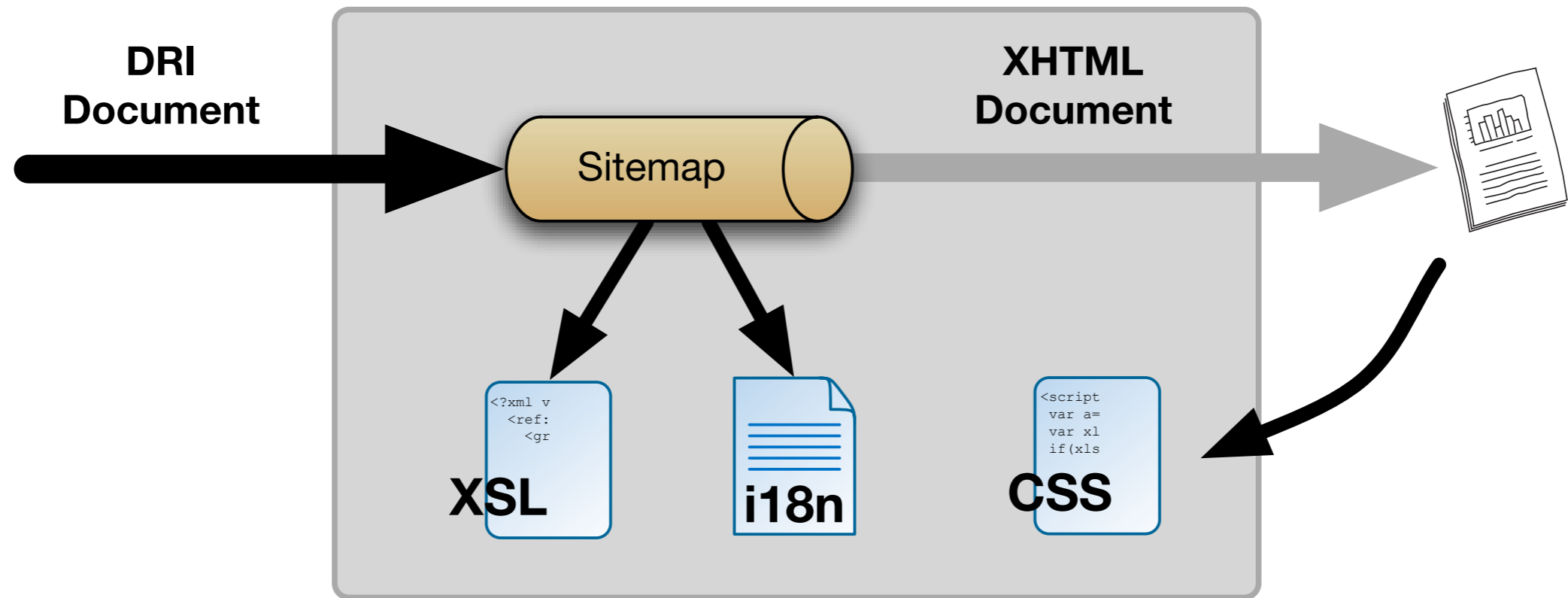
2. Theme Tier

- **XSL + XHTML + CSS**
 - **Create complex themes**
-

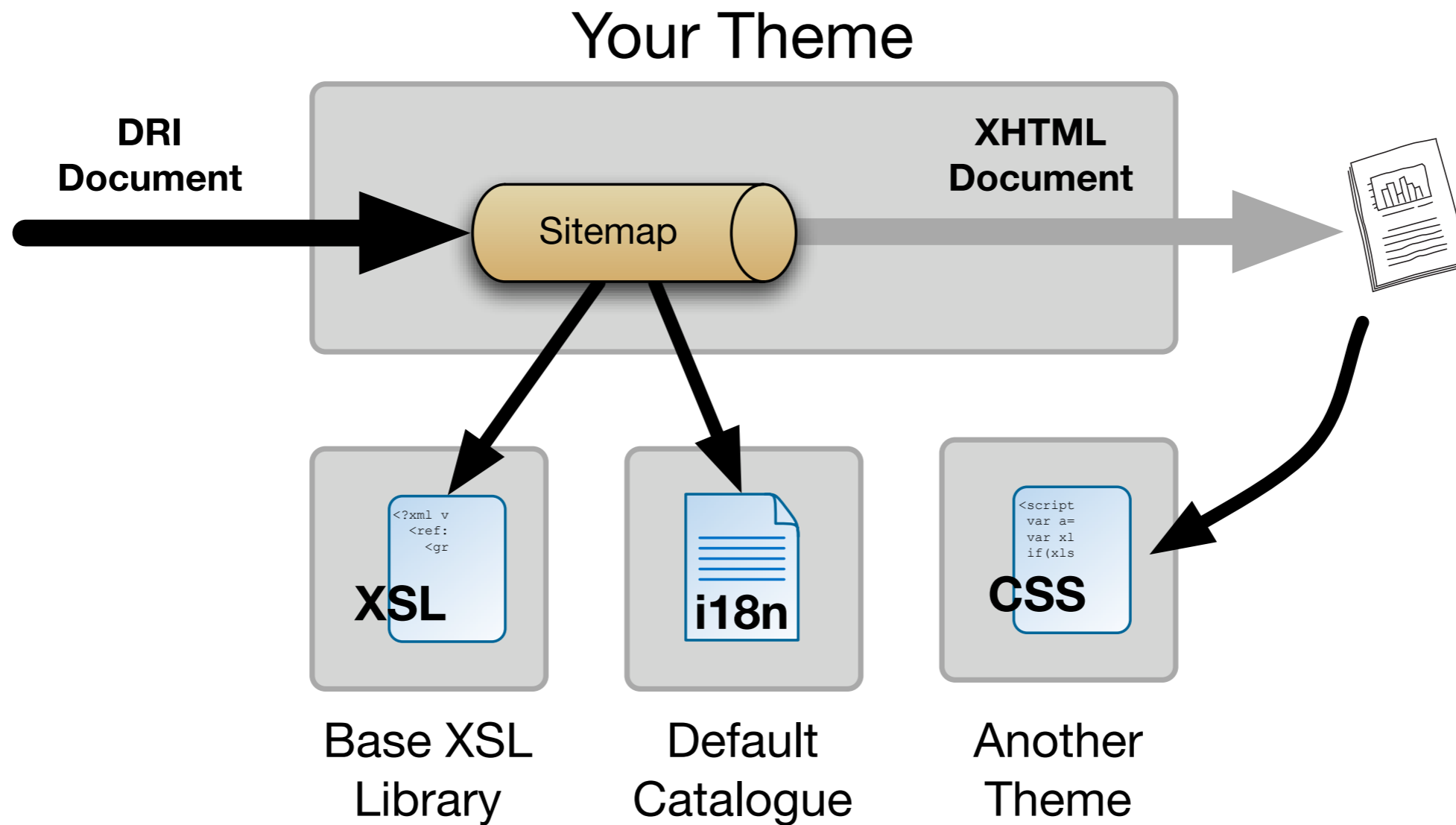
3. Aspect Tier

- Cocoon + Java
- Add new features

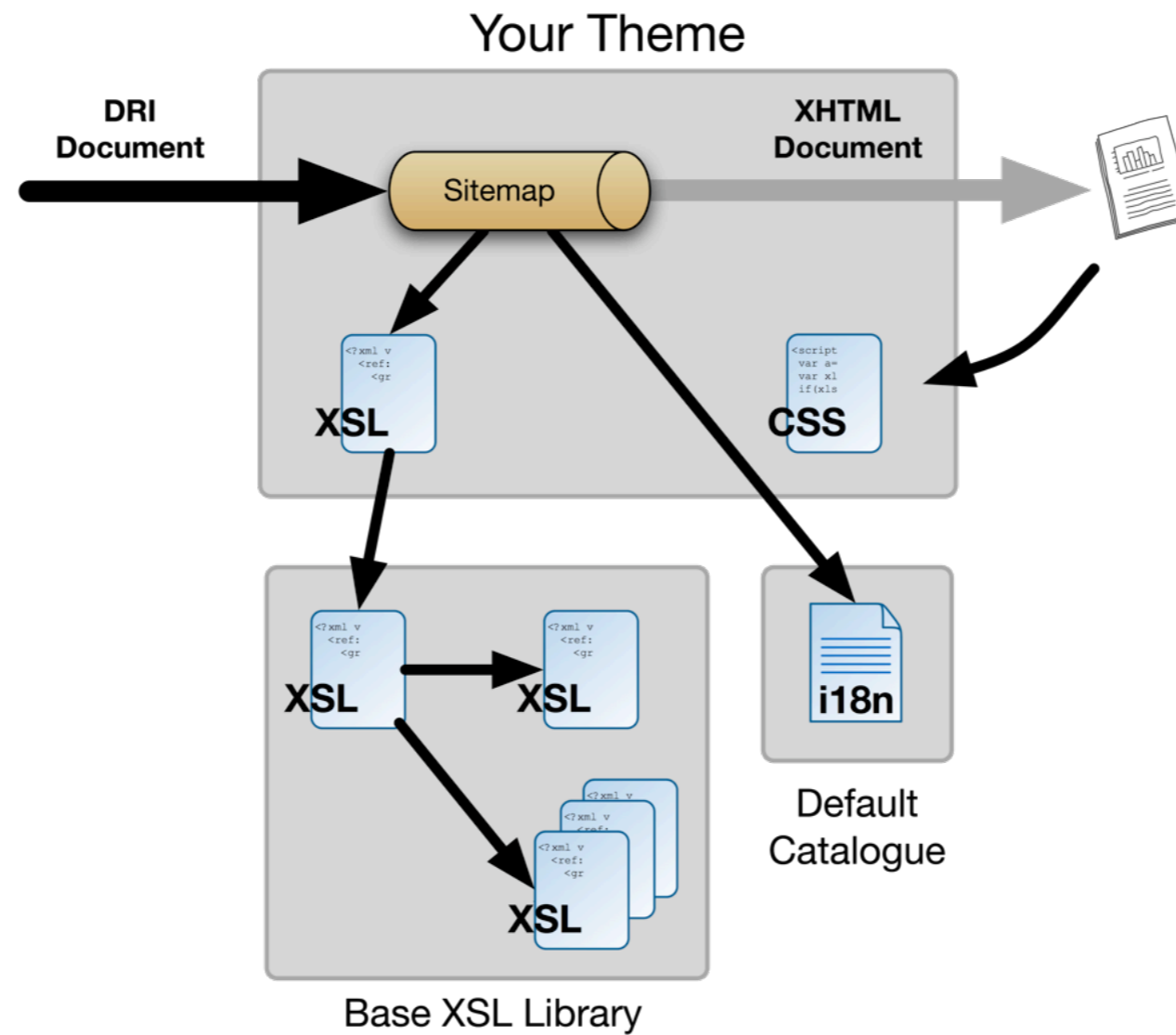
Your Theme



Theme components



Reusing theme components



Complete picture

Base XSL library

/themes/dri2xhtml.xsl

Package

/themes/dri2xhtml/structural.xsl

Structural
display

/themes/dri2xhtml/DIM-Handler.xsl

/themes/dri2xhtml/MODS-Handler.xsl

/themes/dri2xhtml/QDC-Handler.xsl

/themes/dri2xhtml/General-Handler.xsl

Metadata
handlers

Metadata handlers

- ▶ Display items, collections, and communities
- ▶ Different versions for DIM, MODS, and QDC
- ▶ Four display types
 1. SummaryList
 2. SummaryView
 3. DetailedList
 4. DetailedView

Common modifications

- ▶ Header or footer
- ▶ Item thumbnail / logo
- ▶ Citation display

Header and footer

- ▶ Override the default XSL

`/themes/dri2xhtml/structural.xsl`

- ▶ In your theme's local XSL document add the following template definitions:

```
<xsl:template name="buildHeader">  
    ....  
</xsl:template>
```

or

```
<xsl:template name="buildFooter">  
    ....  
</xsl:template>
```

Item Icon

The screenshot shows the DSpace User Group Meeting 2007 website. At the top, there is a dark green header with the DSPACE logo and the text "DSpace User Group Meeting 2007". Below the header is a light green navigation bar with "DSpace Home" and "Electronic Theses and Dissertations". The main content area is titled "Electronic Theses and Dissertations" and features a search box with a "Go" button. A copyright notice is present, followed by a section for "Collections in this community" listing "Texas A&M University" and "University of Texas". The "Recent Submissions" section displays four items, each with a title, author, date, and a button with an icon and a label: "Thesis" or "Dissertation".

DSpace Home → Electronic Theses and Dissertations

Electronic Theses and Dissertations





Full Text Search:

For uses beyond applicable copyright law or license agreement, it is the user's responsibility to secure permission from the copyright holder. Please consult the copyright statement in each university's collection or contact the degree granting institution for further information.

Collections in this community

- [Texas A&M University](#)
- [University of Texas](#)

Recent Submissions

A DSP embedded optical navigation system Gunnam, Kiran Kumar (Texas A&M University, 2004-09-30)	 Thesis
Development and evaluation of operational strategies for providing an integrated diamond interchange ramp-metering control system Tian, Zongzhong (Texas A&M University, 2004-09-30)	 Dissertation
Gas condensate damage in hydraulically fractured wells Adeyeye, Adedeji Ayoola (Texas A&M University, 2004-09-30)	 Thesis
Microstructural viscoplastic continuum model for asphalt concrete Tashman, Laith (Texas A&M University, 2004-09-30)	 Dissertation

Item logos

- ▶ Override the default thumbnail display:

```
/themes/dri2xhtml/General-Handler.xsl
```

- ▶ Override the following templates:

```
<xsl:template  
  match="mets:fileSec"  
  mode="artifact-preview">
```

```
<!-- Generate the thumbnail, if present, from the file section -->
<xsl:template match="mets:fileSec" mode="artifact-preview">

  <xsl:if test="mets:fileGrp[@USE='THUMBNAIL']">
    <div class="artifact-preview">
      <a href="{ancestor::mets:METS/@OBJID}">

        <img alt="Thumbnail">
          <xsl:attribute name="src">
            <xsl:value-of select="mets:fileGrp[@USE='THUMBNAIL']/mets:file/
              mets:FLocat[@LOCTYPE='URL']/@xlink:href" />
          </xsl:attribute>
        </img>

      </a>
    </div>
  </xsl:if>

</xsl:template>
```

Default artifact preview

```
<!-- Generate the thumbnail or icon preview -->
<xsl:template match="mets:fileSec" mode="artifact-preview">
  <xsl:choose>
    <xsl:when test="mets:fileGrp[@USE='THUMBNAIL']">
      ... Show thumbnail image ...
    </xsl:when>

    <xsl:when test="ancestor::mets:METS//dim:field[@element='type']
      [text()='Electronic Thesis']">
      ... Show thesis icon ...
    </xsl:when>

    <xsl:when test="ancestor::mets:METS//dim:field[@element='type']
      [text()='Electronic Dissertation']">
      ... Show dissertation icon ...
    </xsl:when>
  </xsl:choose>
</xsl:template>
```

New artifact preview

Metadata display

[Show full item record](#)

Title: Hull/Mooring/Riser coupled motion simulations of thruster

Author: Ryu, Sangsoo, 1970-

Abstract: To reduce large motion responses of moored platforms in deep waters, a thruster-assisted position mooring system the system, global dynamic responses can be improved in line/riser top tensions, operational radii, and the top and production risers. Kalman filtering as an optimum observer stochastic disturbances is implemented in the developed out wave frequency responses. Investigation of the performance of moored offshore platforms was conducted in terms of six- and mooring line/riser top tensions by means of a fully coupled dynamic analysis program in the time domain and a spectral motion analyses of a platform with thrusters and without compared. The numerical examples illustrate that for deep platforms a thruster-assisted moored platform can be an alternative to a conventionally moored platform.

Description:

URI: <http://handle.tamu.edu/1969.1/1621>

Date: 2005-02-17

Citation

Ryu, Sangsoo, 1970-. "Hull/Mooring/Riser coupled motion simulations of thruster platforms". Texas A&M University. December 2003. Available electronically from <http://handle.tamu.edu/1969.1/1621>.

This item appears in the following Collection(s)

- [Texas A&M University](#)
Thesis and dissertations from Texas A&M University

[Show full item record](#)

Citation display

- ▶ Override the default item display:

```
/themes/dri2xhtml/DIM-Handler.xsl
```

- ▶ Override the following templates:

```
<xsl:template  
  name="itemSummaryView-DIM">
```

```

<!-- This is the default view of a DSpace item in Manakin. -->
<xsl:template name="itemSummaryView-DIM">

  <!-- Generate the info about the item from the metadata section -->
  <xsl:apply-templates select="./mets:dmdSec/mets:mdWrap[@OTHERMDTYPE='DIM']
                        /mets:xmlData/dim:dim" mode="itemSummaryView-DIM"/>

  <!-- Generate the bitstream information from the file section -->
  <xsl:apply-templates select="./mets:fileSec/mets:fileGrp[@USE='CONTENT']">
    <xsl:with-param name="context" select="."/>
    <xsl:with-param name="primaryBitream" select="./mets:structMap
          [@TYPE='LOGICAL']/mets:div[@TYPE='DSpace Item']/mets:fptr/@FILEID"/>
  </xsl:apply-templates>

  <!-- Generate the license information from the file section -->
  <xsl:apply-templates select="./mets:fileSec/mets:fileGrp[@USE='CC-LICENSE' or
          @USE='LICENSE']"/>

</xsl:template>

```

Item summary view

```
<!-- This is the default view of a DSpace item in Manakin. -->
```

```
<xsl:template name="itemSummaryView-DIM">
```

```
<!-- Generate the info about the item from the metadata section -->
```

```
<xsl:apply-templates select="./mets:dmdSec/mets:mdWrap[@OTHERMDTYPE='DIM']  
                        /mets:xmlData/dim:dim" mode="itemSummaryView-DIM"/>
```

```
<!-- Generate the bitstream information from the file section -->
```

```
<xsl:apply-templates select="./mets:fileSec/mets:fileGrp[@USE='CONTENT']">
```

```
<xsl:with-param name="id" value=""/>
```

```
<xsl:with-param name="label" value=""/>
```

```
[@TYPE=""/>
```

```
</xsl:apply-templates>
```

```
<!-- Generate the list of bitstreams -->
```

```
<xsl:apply-templates
```

```
</xsl:template>
```

```
<!-- Add the citation view -->
```

```
<xsl:apply-templates
```

```
select="./mets:dmdSec/mets:mdWrap[@OTHERMDTYPE='DIM']/  
        mets:xmlData/dim:dim"
```

```
mode="itemSummaryView-Citation"/>
```

Item summary view

A Closer Look

Let us pause at this point and take a closer look at ...

- Customized theme's footer
- Dissertation / Thesis Logos
- Citation view



Learning to use Manakin

For DSpace 1.5

UT Austin

April 9th, 2008

Scott Phillips