Pulling in Content with OU Tags & 'Data Files'

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ME, UNC & OU CAMPUS!

- Webmaster == Full Stack Developer

- Started using OU Campus in November 2015 and began converting sections in March 2016.

- As the conversion progressed, we needed a way to replicate 'database like' features in OU Campus.

UNIVERSITY OF
NORTHERN
COLORADO

ABOUT THIS PRESENTATION

- **This is a technical presentation**. We will talk about both code and hopefully how to apply this to your business practices. You don't need to be a developer to get value but it will help.

- The example is for our Library, but I have applied this concept to our news website, dining menus/mobile app, profile listings and academic list of programs.

- Questions at the end please

- **All slides and code will be available.**

CODE!

If you'd like to follow along with the code, go here:

http://bit.ly/tagdemo

So the Library Asks…

- "We need a way to list and display the journals we have subscribed to."

- "The journals need to be organized into categories."

- "Each journal can belong to multiple categories."

JESSE ASKS...

- "How many journals are there & how often are new ones added? Who will add these?"

- "How many categories are needed & will more be added in the future? Who will add these?"

- "Examples of Journal content?"

EXAMPLE JOURNAL 1

Access Science

Includes articles from the latest edition of the McGraw-Hill Encyclopedia of Science & Technology, research updates, thousands of illustrations, Science News headlines, biographies, and more.

Categories:
- Science

Example Journal 2

Children's Core Collection

Children's Core Collection is the ideal collection development, readers' advisory, and curriculum support resource for educators and librarians working with elementary students….

Categories:
- Children
- History
- Reading

TO THE INTERNET!

DATA FILES

- Files that are edited and changed via multiedit or parameters within OU Campus that do not need to be published to the web server.

- Other PCF files will pull in select content using XSL from the data files.

- _props.pcf files are an example of this.

DATA FILE PCF

Github location: /data/access-science.pcf

Data File Pcf

```xml
1  <?xml version="1.0" encoding="utf-8"?>
2  <?pcf-stylesheet path="/outc17/xsl/data-file.xsl" title="Data File" extension="html"?>
3
4  <!DOCTYPE document SYSTEM "http://commons.omniupdate.com/dtd/standard.dtd">
5
6  <document xmlns:ouc="http://omniupdate.com/XSL/Variables">
7      <ouc:info><tcf>section.tcf</tcf><tmpl>properties.tmpl</tmpl></ouc:info>
8
9      <page type="library-journal"/>
10
11     <ouc:properties label="config">
12         <parameter section="Journal Information" name="journal-name" type="text" group="Everyone" prompt="Database Name" >
13             AccessScience
14         </parameter>
15         <parameter name="journal-description" type="text" group="Everyone" prompt="Description" >
16             Includes articles from the latest edition of the McGraw-Hill Encyclopedia of Science &amp; Technology,
17             research updates, thousands of illustrations, Science News headlines, biographies, and more.
18         </parameter>
19         <parameter name="journal-url" type="text" group="Everyone" prompt="URL" >http://www.accessscience.com</parameter>
20
21         <parameter section="Active" name="active" type="select" group="Everyone" prompt="Active">
22             <option value="yes" selected="true">True</option>
23             <option value="no" selected="false">False</option>
24         </parameter>
25
26     </ouc:properties>
27  </document>
```

Github location: /data/access-science.pcf

DATA FILE PCF

```
1    <?xml version="1.0" encoding="utf-8"?>
2    <?pcf-stylesheet path="/outc17/xsl/data-file.xsl" title="Data File" extension="html"?>
3
4    <!DOCTYPE document SYSTEM "http://commons.omniupdate.com/dtd/standard.dtd">
5
6    <document xmlns:ouc="http://omniupdate.com/XSL/Variables">
7        <ouc:info><tcf>section.tcf</tcf><tmpl>properties.tmpl</tmpl></ouc:info>
8
9        <page type="library-journal"/>
10
11       <ouc:properties label="config">
12           <parameter section="Journal Information" name="journal-name" type="text" group="Everyone" prompt="Database Name" >
13               AccessScience
14           </parameter>
15           <parameter name="journal-description" type="text" group="Everyone" prompt="Description" >
16               Includes articles from the latest edition of the McGraw-Hill Encyclopedia of Science &amp; Technology,
17               research updates, thousands of illustrations, Science News headlines, biographies, and more.
18           </parameter>
19           <parameter name="journal-url" type="text" group="Everyone" prompt="URL" >http://www.accessscience.com</parameter>
20
21           <parameter section="Active" name="active" type="select" group="Everyone" prompt="Active">
22               <option value="yes" selected="true">True</option>
23               <option value="no" selected="false">False</option>
24           </parameter>
25
26       </ouc:properties>
27   </document>
```

Github location: /data/access-science.pcf

ONE DATA FILE PER JOURNAL

- All data files will sit in a /data folder.

- Data files do not need to be published. They will be parsed and referenced when the journal listing pages get published.

- Will contain title, description, url and active fields.

- **How are the journal's categories handled?**
  - Variable number of categories
  - Add and remove categories quickly

Pre-Tag Era

TAGS, YO!

Tags allow you to create an "array" of content that can grow and expand.

1 pcf data file can have multiple tags associated with it.

1 tag can be associated with multiple pcf files.

Page Parameters

Title and Metadata

Tags   × journal-children   × journal-history   × journal-reading

Custom Settings

Journal Information

Name   Children's Core Collection

Description   Children's Core Collection is the ideal collection development, read

URL   http://search.ebscohost.com

Active

Active   True   ▼

Github location: /data/childrens-core-collection.pcf

DEMO TAGS!

This demo will use the following six tags and contain ten journals.

Categories (tags):
- journal-africana
- journal-children
- journal-history
- journal-reading
- journal-science
- journal-theatre

- Naming convention:
  - Tag starts with 'journal-'
  - No spaces
  - Lower case (optional)

What's the Plan?

- Page type 1: A list of all the categories that will link to…

- Page type 2: A list of all the journals that are associated with a single category.

- Page type 3: A list of all the journals incase the user doesn't know which category the journal they are looking for is in.

To the Internet!

DEMO TIME

CATEGORY LIST

Role:

A page that lists the categories.

Process:

Option 1 – Loop through all tags and see if the prefix of the tag starts with 'journal-'.

Option 2 – Create a tag collection called 'journal' and loop through all tags in the collection.

Journal Home:

All Categories:

africana
children
history
reading
science
theatre

Github location: /index.pcf

GET ALL TAGS

```
34    <!-- Get all the tags, sort them by name and then test to see if it starts with journal- -->
35    <xsl:template name="getAllTags">
36        <xsl:variable name="prefix" select="'journal-'" />
37
38        <!-- Get all tags from OU Campus -->
39        <xsl:variable name="all-tags" select="doc('ou:/Tag/GetAllTags')/tags" />
40
41        <!-- Loop through all tags -->
42        <xsl:for-each select="$all-tags/tag">
43
44            <!-- Sort the list of tags based on the node name -->
45            <xsl:sort select="name" order="ascending"/>
46
47            <!-- If the tag stars with the prefix of journal- display it -->
48            <xsl:if test="starts-with(name, $prefix)">
49                <a href="categories/{replace(name, $prefix, '')}.html" class="list-group-item">
50                    <xsl:value-of select="replace(name, $prefix, '')" />
51                </a>
52            </xsl:if>
53
54        </xsl:for-each>
55
56    </xsl:template>
```

Github location: /xsl/page-all.xsl

GET TAG COLLECTION

```
59      <!-- Get all tags within a collection -->
60      <xsl:template name="getTagsInCollection">
61          <xsl:variable name="prefix" select="'journal-'" />
62
63          <!-- Get all tags in the collection: from OU Campus -->
64          <xsl:variable name="allTags" select="doc('ou:/Tag/GetChildren?tag=journal')/tags" />
65
66          <!-- Loop through all tags -->
67          <xsl:for-each select="$allTags/tag">
68
69              <!-- Sort the list of tags based on the node name -->
70              <xsl:sort select="name" order="ascending"/>
71
72              <a href="categories/{replace(name, $prefix, '')}.html" class="list-group-item">
73                  <xsl:value-of select="replace(name, $prefix, '')" />
74              </a>
75
76          </xsl:for-each>
77
78      </xsl:template>
```

Github location: /xsl/page-all.xsl

CREATE A COLLECTION?

- With a collection, content authors cannot add new tags to the collection, a level 10 administrator will have to do it.

- Do you want your end users able to create new categories/tags?

Decision!

CATEGORY PAGES

Role:

Pull in the journal data-files that are associated with a single category tag.

Process:

Select all data files associated with a single tag

Sort the data files by their filename.

Loop through files and pull out content.

Science Journals!

ABI/INFORM Global

Articles from nearly 3,000 worldwide business periodicals, including the Financial Times and the Wall Street Journal.

Open Journal

AccessScience

Includes articles from the latest edition of the McGraw-Hill Encyclopedia of Science & Technology, research updates, thousands of illustrations, Science News headlines, biographies, and more.

Open Journal

Explora

Explora is an interface designed for schools and public libraries. Explora supports student research and classroom instruction with rich, reliable content and easy-to-use functionality. UNC databases included in the Explora interface are: Academic Search Premier, History Reference Center, TOPICsearch, Newspaper Source, MasterFILE Premier, MAS Ultra, Science Reference Center, GreenFILE, Topic Overviews 6-12, and EBSCO Ebook Collection.

Open Journal

Statista

Statista is one of the first statistic portals in the world to integrate data on over 80,000 topics from over 18,000 sources onto a single professional platform. Categorized into 21 market sectors, Statista provides direct access to quantitative data on media, business, finance, politics, and a wide variety of other areas of interest or markets. Data can be downloaded and exported for academic use.

Open Journal

Github location: /categories/science.pcf

VISUALIZE IT!

CATEGORY XSL

```
32    <!-- Get all the Data files with the first tag associated with this page -->
33    <xsl:template name="GetDataFilesWithTag">
34        <!-- get page name -->
35        <xsl:variable name="page-name" select="replace($ou:filename, '.html', '')" />
36
37        <!-- Build the api call as a string -->
38        <xsl:variable name="api-call"
39            select="concat('ou:/Tag/GetFilesWithAnyTags?site=', $ou:site, '&amp;tag=journal-', $page-name)" />
40
41        <!-- Get Data Files With the Tag -->
42        <xsl:variable name="data-files-with-tag" select="doc( $api-call )" />
43
44        <!-- Loop through the pages that contain the keyword: -->
45        <xsl:for-each select="$data-files-with-tag/pages/page">
46
47            <!-- Sort the pages by the filename -->
48            <xsl:sort select="path" />
49
50            <!-- Pass the path to a new function to handle the next step -->
51            <xsl:call-template name="GetContentFromSingleDataFile">
52                <xsl:with-param name="path" select="path" />
53            </xsl:call-template>
54
55        </xsl:for-each>
56    </xsl:template>
```

Github location: /xsl/page-category.xsl

CATEGORY XSL

```
61          <!-- Get the content from a single data file: -->
62      <xsl:template name="GetContentFromSingleDataFile">
63          <xsl:param name="path" />
64          <!-- Get the full path to the data file: -->
65          <xsl:variable name="full-path" select="concat($ou:root, $ou:site, $path)" />
66
67          <!-- Get Data File Content -->
68          <xsl:variable name="page-content" select="doc($full-path)/document" />
69
70          <!-- Check to see if it is a data file since the subject page also has this tag associated with it -->
71          <xsl:if test="$page-content/page/@type = 'library-journal'">
72
73              <!-- Create variable of the props section for better readability -->
74              <xsl:variable name="page-props" select="$page-content/ouc:properties[@label='config']" />
75
76              <!-- Check to see if the data file is set to 'active' -->
77              <xsl:if test="$page-props/parameter[@name='active']/option[@selected='true'] = 'True'">
78
79                  <!-- Display the Database's Information with a template in common.xsl: -->
80                  <xsl:call-template name="displayJournal">
81                      <xsl:with-param name="page-props" select="$page-props" />
82                  </xsl:call-template>
83                  <hr/>
84
85              </xsl:if>
86          </xsl:if>
87      </xsl:template>
```

Github location: /xsl/page-category.xsl

Reminder 20min ago?

Github location: /data/access-science.pcf

DISPLAYJOURNAL

```
20      <!-- A template to pull in the name, description and url that is reused -->
21 ▼    <xsl:template name="displayJournal">
22          <xsl:param name="page-props" />
23
24          <h2><xsl:value-of select="$page-props/parameter[@name='journal-name']" /></h2>
25          <p><xsl:value-of select="$page-props/parameter[@name='journal-description']" /></p>
26          <p><a href="{$page-props/parameter[@name='journal-url']}">Open Journal</a></p>
27
28      </xsl:template>
```

Github location: /xsl/common.xsl

DOG BREAK

DISPLAY ALL JOURNALS

Role:

A page that lists all the Journals in alphabetical order.

Process:

Loop through all data files in the /data folder and display title, description and link.

Then, display the tags associated with that journal.

Github location: /az-list.pcf

All Journals

ABI/INFORM Global

Articles from nearly 3,000 worldwide business periodicals, including the Financial Times and the Wall Street Journal.

Open Journal

`science`

AccessScience

Includes articles from the latest edition of the McGraw-Hill Encyclopedia of Science & Technology, research updates, thousands of illustrations, Science News headlines, biographies, and more.

Open Journal

`science`

African American Studies Center

A collection focused on African American and African history and culture, featuring reference works, primary sources, images, maps, timelines, and biographies.

Open Journal

`africana`

Children's Core Collection

Children's Core Collection is the ideal collection development, readers' advisory, and curriculum support resource for educators and librarians working with elementary students. Containing more than 45,000 titles, this rich resource covers fiction and nonfiction works, story collections, and picture books recommended for readers in preschool through sixth grade.

Open Journal

`reading` `history` `children`

ALL JOURNALS, PART 1

```xml
33    <!-- Template that pulls in all files/journals within a single folder -->
34    <xsl:template name="allJournals">
35        <!-- Create variable for the /data folder path -->
36        <xsl:variable name="data-folder" select="concat($ou:root, $ou:site, $ou:dirname, '/data')" />
37
38        <!-- Loop through list and get the file name: -->
39        <xsl:for-each select="doc($data-folder)/list/file">
40
41            <!-- sort based on filename -->
42            <xsl:sort select="node()" order="ascending"/>
43
44            <!-- Get contents of the file -->
45            <xsl:variable name="page-content" select="doc(concat($data-folder,'/', node()))" />
46
47            <!-- Create variable for the page properties -->
48            <xsl:variable name="page-props" select="$page-content/document/ouc:properties[@label='config']" />
```

Github location: /xsl/page-azlist.xsl

ALL JOURNALS, PART 2

```
49
50          <!-- Check to see if the data file is set to 'active' -->
51          <xsl:if test="$page-props/parameter[@name='active']/option[@selected='true'] = 'True'">
52
53              <!-- Display the Database's Information with a template in common.xsl: -->
54              <xsl:call-template name="displayJournal">
55                  <xsl:with-param name="page-props" select="$page-props" />
56              </xsl:call-template>
57              <!-- Pull in the tags: -->
58              <ul class="list-inline">
59                  <xsl:call-template name="getTagsForJournal">
60                      <xsl:with-param name="path" select="concat($ou:dirname, '/data/', node())" />
61                  </xsl:call-template>
62              </ul>
63              <hr/>
64          </xsl:if>
65      </xsl:for-each>
66  </xsl:template>
```
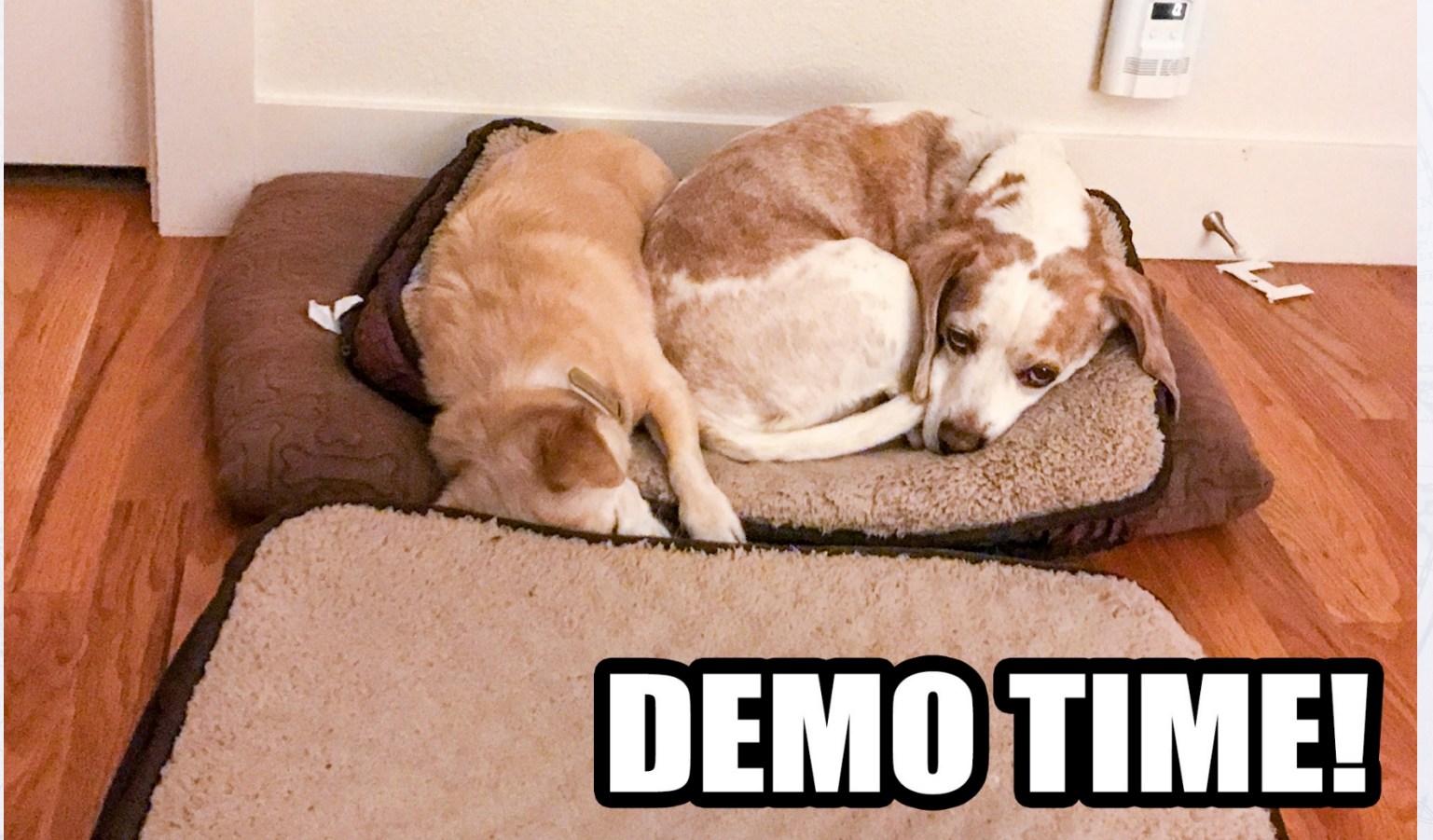
Github location: /xsl/page-azlist.xsl

DISPLAYJOURNAL, AGAIN

```
20    <!-- A template to pull in the name, description and url that is reused -->
21▼   <xsl:template name="displayJournal">
22        <xsl:param name="page-props" />
23
24        <h2><xsl:value-of select="$page-props/parameter[@name='journal-name']" /></h2>
25        <p><xsl:value-of select="$page-props/parameter[@name='journal-description']" /></p>
26        <p><a href="{$page-props/parameter[@name='journal-url']}">Open Journal</a></p>
27
28    </xsl:template>
```

Github location: /xsl/common.xsl

GET TAGS FROM EACH DATAFILE

```
68        <!-- Get all the tags associated with a journal/data-file -->
69        <xsl:template name="getTagsForJournal">
70            <xsl:param name="path" />
71
72            <!-- create the path to the list of tags: -->
73            <xsl:variable name="api-call"
74                          select="concat('ou:/Tag/GetTags?', 'site=', $ou:site, '&amp;path=', $path )" />
75
76            <!-- get all the tags associated with a single data file: -->
77            <xsl:variable name="all-tags" select="doc( $api-call )/tags" />
78
79            <!-- loop though the tags on the page:-->
80            <xsl:for-each select="$all-tags/tag">
81                <li>
82                    <a href="categories/{replace(name, 'journal-', '')}.html" class="label label-default">
83                        <xsl:value-of select="replace(name, 'journal-', '')" />
84                    </a>
85                </li>
86            </xsl:for-each>
87
88        </xsl:template>
```

Github location: /xsl/page-azlist.pcf

TAGS IN THE WILD

- Library Database

- Program Listing

- Dining Menus

- Profile Pages

OU Resources

- Adding and managing tags (for end users & administrators)

- XSL Tag API (for developers)

- Dynamic Indexing with XSL

Presentation Resources

- Slides: http://jessclark.com/outc17

- Code: https://github.com/jessgusclark/outc17
  - Tags are not stored in the data-files, you will need to add them!
  - You may need to change the XSL path on each pcf file (Find & Replace)

- Blog post that this presentation is based on: https://jessclark.com/using-tag-management-to-pull-in-files/

- My Blog: https://jessclark.com/

- More photos of Brewer: https://photo.jessclark.com/tags/brewer
- More photos of Barley: https://photo.jessclark.com/tags/barley

Thank You!

JessClark.com/outc17

OUTC 2017

Explore the Possibilities

APRIL 2-6 | SAN DIEGO, CA