Worthington Memory:
Advantages / challenges of moving to an open source framework

Stefan Langer, Web Developer
About us / Background

“Follow me and you will see, the library is fun for you and me!”

*Thing 1 and Thing 2* illustration, available at MotherKao.com

Web Team: Worthington Libraries

- Two person team
- Majority of Web sites: Drupal CMS
- Work in a Windows environment
- Not archivists
Worthington Memory: History

- Local history Web site
- Launched 2003 (Worthington Bicentennial)
- Homegrown: Built by library staff
- Technical aspects:
  - Windows server
  - ColdFusion
  - SQL Server
  - Dublin Core
- Content added by trained staff and volunteers
Tour: Homepage
Tour: Browse the Collection
Tour: Expanded record

Achsa Maynard Johnson Oil Portrait

Description: Achsa Maynard Johnson Oil Portrait

Abstract: This is an oil portrait of Achsa Maynard Johnson (b. April 7, 1791 - d. May 21, 1882.) In 1815 Achsa, daughter of Moses Maynard, married Orange Johnson (b. February 7, 1798 - d. November 28, 1876) a comb maker by trade from Connecticut. The comb business was very successful, and Achsa and Orange moved into their home at 556 High Street in 1816. They had three children, but only one, Mary, survived into adulthood. The family moved to Columbus in 1847, when their daughter married Francis Sessions.

Date: ca. 1845

Format: art

Subject: Arts Ohio Worthington

Subject: Johnson, Achsa Maynard, 1791-1882

Subject: Portraits

Contributor: Worthington Historical Society (View Web site)

Rights: Access is provided for research purposes. Please contact Worthington Historical Society for permissions.

View Dublin Core Record
Tour: Full image view
By-Laws and Resolutions of the Grand Lodge of Ohio

Booklet
Date: 1820-12

By-Laws and Resolutions of the
Most Worshipful
Grand Lodge
of the
Ancient and Honorable Fraternity
Of Free and Accepted Masons
In the
State of Ohio,
Adopted at Their Annual Communication
Held at Columbus.
Tour: Cemeteries database
Tour: Worthington News Index

Worthington News Index

3,890 articles found
Articles ordered by date newest to oldest, then by title
- Article includes a photograph or illustration

Article 1 of 3,890
Title: Worthington man’s cancer fight helped determine daughter’s risk
Author: Andrew King
Keywords: Jay McDaniel, colon cancer
Microfilm roll: This Week Worthington News (2014) - 13358339B
Newspaper: This Week Worthington News
Publication Date: March 20, 2014
Page: A3
Location: Worthington
Subject 1: Health

Article 2 of 3,890
Title: It takes a special person to be a Worthington teacher
Author: Randy Banks
Keywords: Worthington teachers
Microfilm roll: This Week Worthington News (2014) - 13358339B
Newspaper: This Week Worthington News
Publication Date: March 6, 2014
Page: A7
Location: Worthington
Subject 1: Worthington Schools (Worthington Ohio) Officials and employees

Article 3 of 3,890
Title: Worthington Industries’ plans move to council for approval
Author: Candy Brooks
Keywords: Worthington Industries improvements
Newspaper: This Week Worthington News
Publication Date: March 13, 2014
Page: A1
Location: Worthington
Subject 1: Worthington Industries
**Tour: Data entry**

![Data entry interface](image)

<table>
<thead>
<tr>
<th>DC Field</th>
<th>Data</th>
<th>Scheme</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Title</strong></td>
<td>Maynard Johnson Family Photo Album</td>
<td></td>
</tr>
<tr>
<td><strong>Creator</strong></td>
<td>Columbus Picture Gallery, Columbus, Ohio; M.P. and A. I. Rice, Washi</td>
<td></td>
</tr>
<tr>
<td><strong>Subject 1</strong></td>
<td>Sessions, Francis C. (Francis Charles), 1820-1892</td>
<td>LCSH</td>
</tr>
<tr>
<td><strong>Subject 2</strong></td>
<td>Sessions, Mary Johnson, 1823-1919</td>
<td>LCSH</td>
</tr>
<tr>
<td><strong>Subject 3</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Subject 4</strong></td>
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<td><strong>Subject 5</strong></td>
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<td><strong>Subject 6</strong></td>
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<td><strong>Subject 7</strong></td>
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<td><strong>Subject 8</strong></td>
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<td><strong>Subject 9</strong></td>
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<tr>
<td><strong>Subject 10</strong></td>
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<td></td>
</tr>
<tr>
<td><strong>General Theme</strong></td>
<td>Acts</td>
<td></td>
</tr>
<tr>
<td><strong>Browse Date</strong></td>
<td>1850s</td>
<td></td>
</tr>
</tbody>
</table>

**Description:**

Portrait of Francis Sessions and Full Length Photograph of Mary Johnson Sessions

Table of Contents:
Islandora is an open-source software framework designed to help institutions and organizations and their audiences collaboratively manage, and discover digital assets using a best-practices framework. Islandora was originally developed by the University of Prince Edward Island’s Robertson Library, but is now implemented and contributed to by an ever-growing international community.

Built on a base of [Drupal](https://www.drupal.org), [Fedora](https://www.fedora-project.org), and [Solr](https://solr.apache.org), Islandora releases solution packs which empower users to work with data types (such as image, video, and pdf) and knowledge domains (such as Chemistry and the Digital Humanities). Solution packs also often provide integration with additional viewers, editors, and data processing applications.

Islandora operates under a [GNU license](https://www.gnu.org/licenses/).
Why Islandora?

- **Fedora Commons**
  - Underlying architecture for the digital repository
  - Extremely flexible (everything is an object)
  - Standards compliant
  - Uses the OAIS Model
  - Powerful
  - Active community
- **Drupal**
  - We know (and like) Drupal!
  - Customizable, extensible, themeable
  - Active community
- **Islandora**
  - Connects Fedora, Drupal and 3rd party software
  - Open source (so the price is right!)
  - Active community + Discovery Garden
Challenges

“I have heard there are troubles of more than one kind….”

*I Had Trouble in Getting to Solla Sollew* book cover, available at Digital-Storytime.com

Challenge #1

- We're not archivists!
- Fedora Commons and Islandora bring:
  - New terminology
  - New mental models
  - New technology
  - Software with crazy names
Nerds like Us

One site, two site . . .

<table>
<thead>
<tr>
<th>Old site (ColdFusion)</th>
<th>New site (Islandora)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DC</td>
<td>MODS</td>
</tr>
<tr>
<td>Homegrown system</td>
<td>Open source software</td>
</tr>
<tr>
<td>ColdFusion</td>
<td>PHP</td>
</tr>
<tr>
<td>SQL Server</td>
<td>MySQL</td>
</tr>
<tr>
<td>Drupal 6</td>
<td>Drupal 7</td>
</tr>
<tr>
<td>Not archivists</td>
<td>Pretending to be archivists</td>
</tr>
<tr>
<td>2 apps</td>
<td>20+ apps!</td>
</tr>
</tbody>
</table>
Additional software

- ADORe djatoka
- Ant
- Apache
- Drupal
- Fedora Commons
- FFmpeg
- FFmpeg2theora
- FITS
- Ghostscript
- Gsearch
- ImageMagick
- Java
- LAME MP3 Encoder
- Leptonica
- Maven
- MySQL
- PHP
- Tesseract OCR
- Tomcat
- Solr

20+ applications!
Components of Islandora

- Islandora
  - Code Snippets/Applications
    - JMS
    - Micro Services Engine
      - XSLTs
      - PHP/Python Snippets
    - JMS
Challenges

- Open source software:
  - Sometimes isn't well-documented
  - Community may die, leaving software unsupported
  - May depend on *other* open source software

- Islandora
  - Doesn't take advantage of Drupal in the way we thought
  - Isn't Windows-compatible (including documentation)
  - Complicated installation and configuration

- What to do?
Get involved!

But I’ve bought a big bat.
I’m all ready, you see.
Now my troubles are going
To have troubles with me!

Yesss I am All Ready illustration, available at Quoteshelp
Get involved!

- Community forums
  - Ask questions
  - Share answers
- Contribute code
  - Located Windows-incompatibilities
  - Submitted 10 patches
  - Merged into the latest release: Islandora 7.x-1.3
Advantages

“Oh, the Places You’ll Go!”

*Oh, the Places You’ll Go!* book illustration, available at The Highland Echo

[http://highlandecho.com/2012/05/](http://highlandecho.com/2012/05/)
Advantages

- Public
  - Better tools
  - More dynamic, educational experience
  - WM, cemeteries, and WNI records in same search results
  - Each record has its own page!
Advantages

- Staff
  - Better workflow behind-the-scenes
  - Reduced redundancies / increased efficiency
Advantages

- Developers
  - Customizable
  - New modules: Islandora Sync
  - Programmers can create and add missing features
- Community
- Rapid development (in the future)
Where are we now?

“Don't give up, I believe in you all . . . .”

*The Bippolo Seed* book illustration, available at NPR

Web Team back in January . . . .

*Cindy Lou Who* illustration, available at MoviePropsCollectors
Where are we now?

- Data migration still pending
  - Main site
  - Cemeteries database
  - Worthington News Index
- Mostly through the technological hurdles
- Lots of decisions to be made:
  - How to package objects (book, PDF, zoomable image)
  - Site navigation
  - Approval workflow
  - Maintaining standards compliance
- Starting to enter more familiar territory
Thank you!

Stefan Langer, slanger@worthingtonlibraries.org

Argyle Dr. Seuss Thing 1 Thing 2 design, available at shydesign