The Goddard Library

...who are we and how do we fit into the organization?

**Mission:** To understand and protect our home planet, to explore the Universe and search for life, and to inspire the next generation of explorers

- Earth Science, Space Science, and Engineering disciplines
- 6,000 scientists and engineers

**Mission:** Expand knowledge of the Earth and its environment, the solar system and the universe through observations from space

**Science / Technical Library**

**Mission:** Provide the information resources Goddard's scientists and engineers need to accomplish Goddard's mission

**Repository Overview**
Basic Functionality
- Maintain information on each Goddard author
  - Name variants
  - Organization code
- Create relationships
  - Between the Goddard author and publication objects
  - Among Goddard authors
- Display publication information
  - Link to the full-text published material
  - Attached full-text files
- Search by author, title, subject, organization code

Basic Requirements
- Flexible architecture
  - Repository
  - Metadata schemas
- Sources for data
  - Author authority
  - Publication information
- Data management
  - Crosswalks
  - Utility for loading and de-duping records
  - Utility for matching authors
  - Linking to full-text
- Open source technologies

Underlying Technologies
- Open Source
  - Ubuntu Server (Linux)
  - MySQL
  - Apache
    - Tomcat
    - Lucene
    - Webserver
  - SHERPA/RoMEO API
- Commercial
  - OpenURL Link Resolver
Fundamental Building Blocks

- Fedora Repository
  - Working in Objects
    - Collection object
    - Author objects
    - Publication objects
    - PDF objects
  - Working with Queries (Disseminations)
    - Fedora relational metadata
      - A whole new world (of looking at objects)
    - One of the best reasons to select Fedora
- Drupal 6
  - Custom modules & themes to bring it all together

Author Objects

- Authors holdings database
  - Helped us get started while we worked on Fedora architecture
- MADS
  - Author metadata
  - Challenge:
    - Author name variants
    - Affiliation information
    - Persistent identifier rationale

Author Record
Publication Objects

- Publications holdings database
- PUB_MD
  - Book, journal, and proceedings metadata
  - Persistent identifiers auto-generated
- Challenges:
  - Harvesting
  - De-duping
  - OpenURL vs. downloading

Publication Record

Establishing Relationships

- Connecting authors with their publications
- Connecting authors with fellow authors
Pulling it Together

- Using custom Drupal-based interface
  - Collection modules with common API
  - Themes using Zen as foundation

Future considerations
- Self-submission
- Hydra
- Islandora
- BibApp
- Something else?
  - Fedora very plug-able

Lessons Learned

- Talk to the end user early and often
- Refine different requirements
- Usability testing at multiple stages
- Publisher metadata can be problematic
  - Author disambiguation
  - Record de-duping
  - OpenURL creation
- Automation can only go so far
  - Quality control
  - Need to change scripts
- There’s always something new on the horizon
Questions?

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