Hydra Use Cases & Development Practices
24x7
Open Repositories 2011
Austin, Texas
June 10, 2011
Line Up

• Stanford Hydra Heads – SALT, ETDs and EEMs
  – Tom Cramer
• Libra at Uva
  – Julie Meloni
• Hydra in Hull
  – Richard Green
• Hydra @ Northwestern
  – Bill Parod & Mike Stroming
  – Bess Sadler
• Conclusion: So What is Hydra?
  – Tom (again)
Objectives

- Chris gave an overview of the collaboration & context for the project yesterday
- This will give you a review of the extant Hydra heads from many of the partners
- Bess will talk about how we’ve structured successful shared development practices on a large & distributed team
- Matt will do the technical nitty gritty at 5 PM
Stanford’s three Hydra Heads

1. SALT
   (Self Archiving Legacy Toolkit)

2. ETDs
   (Electronic Theses & Dissertations)

3. EEMs
   (Everyday Electronic Materials)
SALT

• Archives comprising digitalia require management, access & preservation
• They are expensive and labor-intensive to process and present
• SALT inverts the traditional approach (process-then-deliver) with a new paradigm (deliver-and-process-as-you-go)
• Need: System for presenting, managing & preserving digital archival objects
• Users: Archivists, Donors, Researchers, Projects
SALTworks Data Flow

Ingest

EAD

Files

SALT
SALT

• Bulk ingest
• Permissions aware discovery & reading
• Role-based editing, tagging & annotation
• In line document viewer
SALT

• Whole management of the archival object!
• Previously:
  - Files on a separate files store
  - A distinct index with its own faceted browser (Flamenco, pre-BL)
  - A separate Drupal site for collection landing page
  - A separate Mysql db for tags

= a Nightmare to synchronize, update and migrate
ETD’s

• Submission & approval system for ETDs
• Critical Functions
  – Integration with PeopleSoft
  – Integration with Library Management System
  – ETD Upload, Description
  – Support for auxiliary files
  – Support Licensing & Embargo Settings
• Users: Students, Faculty Readers, Registrar’s Office, Library Staff
ETD Data Flow

PeopleSoft

Stub Object → Student Upload → Submit → Publish

Hydra ETD

Student

File for Degree → Verify

Registrar

Faculty Reader

Approve
ETDs

- Complex objects (PDF, auxiliary files, permissions letters)
- Integration with external systems (PS, ILS)
- Workflow tool
- Highly tailored UI
EEMs

• Workflow tool for librarians
• Select & submit digital monographs to the library
• Run through technical services (Acq & Cataloging)
• Publish & preserve completed objects
• Simple objects
Preservation Core
ILS / Catalog
PeopleSoft
JHOVE
...etc.
Many Heads

ETDs

Fedora

One Body

Preservation Core
ILS / Catalog
PeopleSoft
JHOVE
...etc.

Integration of Lego Bricks of Services
So What is Hydra?

- Mgmt Views
- Active Fedora & Opinionated Metadata (OM)
- Access Views
- solr
- Triple store
- Repository
- Storage
So What is Hydra?

- Design pattern with common componentry and platforms
  - Fedora, Ruby on Rails, solr, ActiveFedora, Blacklight

- Tremendous (but not perfect) overlap of data models across heads
  - Object types, data streams, syntax
So What is Hydra?

• Framework for generating Fedora front-end applications w/ full CRUD functionality

• That supports distinct UI’s, content types, workflows, and policies
So What is Hydra?

• And a growing community of institutions and developers committed to framework and collaboration
  – Not grant based
  – Distributed
  – Robust
  – Open
With a growing suite of “solution bundles”

- ETD’s
- Images
- Media
- Institutional Repositories
- Open Access Publishing
- Research Data deposit
- Archival collections
- Galleries & exhibits
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