Digital Commonwealth 2.0
Creating Digital Collections with the Redesigned Repository System

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Why build a new repository?

- DSpace features limited
- need a system tailored to needs, context
- manage infrastructure/technology
- merge portal & repository functions
Current situation

DC Repository
(DSpace)

Other Repositories
(MA State Lib, WGBH, Noble, C/W Mars, etc.)

DC Portal
(Omeka)

OAI-PMH

OAI-PMH

Needs

- scalable
- customizable
- accommodates diverse content
- accommodates diverse contributors
- extensible
- preservation-worthy
- discoverability
- shareability
Hydra Framework

An ecosystem of components that facilitate the creation of digital repositories (the body) supporting multiple 'heads.'

- open source
- rapidly growing community of adopters
  - Stanford, Notre Dame, Duke, Northwestern, Indiana, WGBH, Penn State, Virginia, Columbia
- flexible & extensible
- built on proven technologies
Hydra Framework

- Fedora Commons
- Solr
- Blacklight
- Hydra Head
- Ruby on Rails
Fedora Commons (storage)

- any type of digital content
- any metadata schema
- platform agnostic
- scalable to millions of objects
- manage versions and datastreams
Solr (indexing)

- full-text search
- hit highlighting
- faceted search
- (near) real-time indexing
- rich document (e.g., Word, PDF) handling
Blacklight (search and discovery)

- originally developed as an open-source OPAC
- faceted browsing
- content-specific templating
- bookmarking
Hydra Head (creation & editing)

- create objects in a repository
- upload files
- edit metadata
- manage permissions
Hydra Framework

Ruby on Rails

Your localized Web Applications

Models

Primary Gems

Hydra-Head
creating and managing objects (CRUD)

Hydra Model Logic

Hydra Access Controls

Supporting Gems

OM

ActiveFedora

Rubydora

Solrizer
(Solrizer-Fedora)

Blacklight
discovering & viewing objects (R)

Search/Facet Logic

System Services & Datastores

Fedora REST API

Fedora

Solr REST API

Solr
Project Overview

- replace current DSpace functionality
- migrate content & metadata
- beta release; testing
- integrate portal functionality
- ingest OAI-harvested content
- launch of site integrating repository & portal

- preservation repository
- application development
Components

- **Commonwealth-Admin**
  - administrative functionality
  - upload, edit, manage collections & objects
  - MODS metadata schema
  - derivative creation
  - ARK minting

- **Commonwealth-Search**
  - search & discovery functionality
  - search/browse for collections & objects
  - view content
  - share content
  - OAI-PMH feed
Where We're At

- **basic repository functionality**
  - create and manage simple objects
  - derivatives
  - persistent identifiers
  - MODS metadata

- **initial content population**
  - some DSpace collections
  - BPL collections

- **search & discovery interface**
  - searching, browsing, sharing
  - user content creation

- **beta release (soon)**
Show & Tell Time
Features to be added

- admin dashboard
- workflow staging
- complex objects
- series & subseries for collections
- batch uploads
- ingest of MARC & EAD records
- advanced search
- geospatial searching & browsing
- book viewer
- export slideshow
Questions?

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