

Islandora Solution for Big Video

September 18, 2014

Erin Tripp, discoverygarden inc

Heather Heckman & Mark Cooper, University of South Carolina



discoverygarden
Managing Digital Content

Agenda

- Project overview
- Achievements
- Challenges
- Goals

Introductions

- Hi, I'm Erin ...
- Since 2011, I've been involved in the Islandora project
- I've been involved in close to 30 different Islandora projects, including the MIRC-DVR project at USC
- Employed at discoverygarden, partner in the Islandora Foundation

Project Overview

- Between 1980 and 2009 USC attempted to make video holdings available, namely the Fox Movietone News Collection. In 2009 funding was secured for phase 1 project.
- In 2011 USC began work with Islandora and discoverygarden to create a content model architecture, plan metadata (PBcore, MODS, DC), and as part of a pilot project
- By 2012 the pilot is launched online

<http://mirc.sc.edu/about>

<http://mirc.sc.edu/islandora/object/usc%3A23292>

Project Overview

The MIRC-DVR content model is tiered for preservation, media production and streaming web access

Collections	
MODS	text/xml
DC	text/xml
Thumbnail	image/jpg

Access Object	
PBCore instantiationDoc	text/xml
DC	text/xml
Thumbnail	image/jpg

Externally Managed Video Asset
h.264

Mezzanine Object	
PBCore instantiationDoc	text/xml
DC	text/xml
Thumbnail	image/jpg

Externally Managed Video Asset
ProRes

Preservation Master Object	
PBCore descriptionDoc	text/xml
DC	text/xml
Thumbnail	image/jpg

Externally Managed Video Asset
DPX

Project Overview

- Size of files required tiered systems with multiple media copies for preservation, intermediate use and streaming access.

Preservation Master	DPX 4K 16bit B&W	2.05 TB/hr
Mezzanine	ProRes 4:2:2 4K	339 GB/hr
Access	h.264 @ 800 kbps	400 MB/hr

Project Overview

- Access to the backend is controlled by XACML policies
- Access is designed to protect early metadata versioning for materials that cannot be described until they are available to cataloging staff in a digital environment.
- The backend is synced to a Filemaker database that bolsters metadata versioning while also supporting complex workflow tracking, from inspection of the film original to digitization and transcoding.

Achievements

- Access: Free, off-site access to low-res, watermarked video (alongside robust descriptive metadata)
- Access: Catalog functionality (search, browse, facets, record export)
- Access: OAI Harvesting for tiered architecture
- Preservation: A handful of digital surrogates
- Preservation: Basic Fedora infrastructure to manage them

Continued Challenges

- 220 TB of mirrored storage on Gluster clusters
 - Only 100 hours of DPX assets!
- Fixity checking & policy-based management pending
- Off-site backup for disaster recovery pending

Goals Going Forward

- Free, off-site access to associated paper, still photo & audio materials
- Durable linking & embedding
- End-user contributed metadata
- Time-based metadata
- Incremental improvements to existing workflows & interfaces, as needed

Questions ...



Thank you!

For more information or to schedule a private demonstration of any Islandora functionality please contact info@discoverygarden.ca

