Repository solutions for time-based media

Open Repositories 2013
9 June 2013
Presenters

- Claire Stewart, Northwestern University
- Karen Cariani, WGBH
- Brian Tingle, California Digital Library
- Todd Grappone, University of California Los Angeles
- Declan Fleming, University of California San Diego
- Discussion, Q&A
Avalon Media System

Claire Stewart

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Project Objectives

**Goal:** Create an open source system to enable libraries and archives to provide online access to video and audio collections

- Digital audio/video management and delivery system, focused on needs of libraries and archives
- Follow an agile, open source development model
- Leverage existing technologies, where feasible
- Communicate and market the project broadly to increase awareness and grow the community of users and developers
Project Overview

- Funded in part by a National Leadership Grant from the Institute of Museum and Library Services

- Original name: Variations on Video

- Planning grant:
  - August 2010 – July 2011

- Implementation grant:
  - September 2011 – October 2014

- Partnership between libraries at Indiana University and Northwestern University
Project Partners and Collaborators

University of Virginia
Indiana University
New York University
Ohio State University
Stanford University
The University of York
WGBH
Project Progress

• Development team hired
• Trained on agile development (Scrum), May 2012
• Releases:
  – Release 0, July 2012
  – Release 0.5, October 2012
  – Release 1.0, May 2013
• New name: Avalon
• Participation in Hydra and Matterhorn communities
1.0 Release Functionality

- Secure delivery of video and audio to desktop browsers and iOS (iPad/iPhone) devices
- Integration with a variety of authentication systems are supported, along with management of group-based authorization
- Content can be added using manual upload and description, or using the batch import facility (dropbox + spreadsheet)
- Server-side transcoding using ffmpeg/Matterhorn
- For fast and easy discovery, faceted search is based on the Blacklight discovery tool using MODS metadata
- Support for both Adobe Media Server and the Red5 open source media server for audio and video streaming
Demo of Version 1.0

Using the System
Use the search box, or browse using the terms on the left side to discover content. Some content is only available when you sign in. Sign in with your Northwestern NetID and password.
Avalon 1.0 Installation Options

Approach #1: Downloading a Virtual Machine Image

Approach #2: Manual Install
1. Puppet-assisted manual install. Puppet automates part of the process but is a "black box."

Also a sandbox for testing

See http://www.avalonmediasystem.org/download
Future Avalon Releases – 2.0

Releases planned every 3 months

• Release 2 (late summer 2013) – key improvements planned
  – More robust permissions and automated authorization groups
  – Media player improvements
  – Basic monitoring and troubleshooting support

• Release 3 (end of 2013) – key improvements planned
  – Navigation by structural metadata (chapters, acts, scenes, tracks, etc.)
  – Import of previously transcoded derivatives, transcoding improvements (profiles? speed-up?)
  – Batch updating of existing records, Migration and assignment of persistent URLs
  – Logging (usage, errors) and usage statistics

Track the roadmap:
https://wiki.dlib.indiana.edu/display/VarVideo/Road+Map+Post+R1
Development process

- A single, blended team
- Scrum & JIRA
- F2F for scrum training, prioritization
- Daily standups, IRC
- Pulling in sysadmins, testers as needed
- More PO time
Working towards community

- Lessons learned in development process
- Working with Hydra community
- Working with OpenCast matterhorn
- Integration with other tools: Kaltura, LMS’s
- How potential adopters perceive Avalon
Keeping up with Opencast

• Contributing code changes/additions
• Finding the right velocity; Engage player
• Overhead of Matterhorn, installing ffmpeg
• Potential need for Avalon to work in non-Matterhorn environments
  – Support for other transcoding solutions
  – Calls from Engage Player
• Other use cases for Avalon-Matterhorn interaction
Keeping up with Hydra

- Media head work at RockHall, WGBH
- Emerging interest in ‘gemification’
- Fedora Futures
Learn More About Avalon

- **Website:** [http://avalonmediasystem.org/](http://avalonmediasystem.org/)
- **Listserv:** E-mail avalon-discuss-l-subscribe@indiana.edu to subscribe
- **Social media:**
  - @avalonmediasys
  - facebook.com/avalonmediasys

- **Or contact:**
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Avalon is funded in part by a National Leadership Grant from the Institute of Museum and Library Services.