

The Path to Avalon 7

or, how we stopped worrying
and learned to love Hyrax

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Samvera Connect 2017

A Brief History

- One of the first ~~Hydra~~ Samvera Solution Bundles
- Solved a core problem (Audio and Video)
- But it only focused on time-based media
- Grew quickly but grew up alone
- Currently in production at 10+ institutions



Project Funding

- 2010-2011: IMLS Planning Grant
- 2011-2015: IMLS National Leadership Grant
- 2015-2017: Andrew W. Mellon Foundation
- 2017-2019: IMLS National Leadership Grant

Partnership between libraries at Indiana University and
Northwestern University





It Just Makes Sense

- Many institutions have mixed collections with time-based media, but no clear path to serving it to a larger audience
- A single repository base lowers technical overhead
- Developers contributing to Hyrax will be able to quickly get up to speed and help out the Avalon team where they need it

avalon 5

- Playlists and markers
- Ingestion API
- Captions

avalon 6



avalon 7



The First Step

- Diving into the Hyrax codebase
- Looking for opportunities to embed the Avalon team into community development
- Contracted with DCE to kickstart development

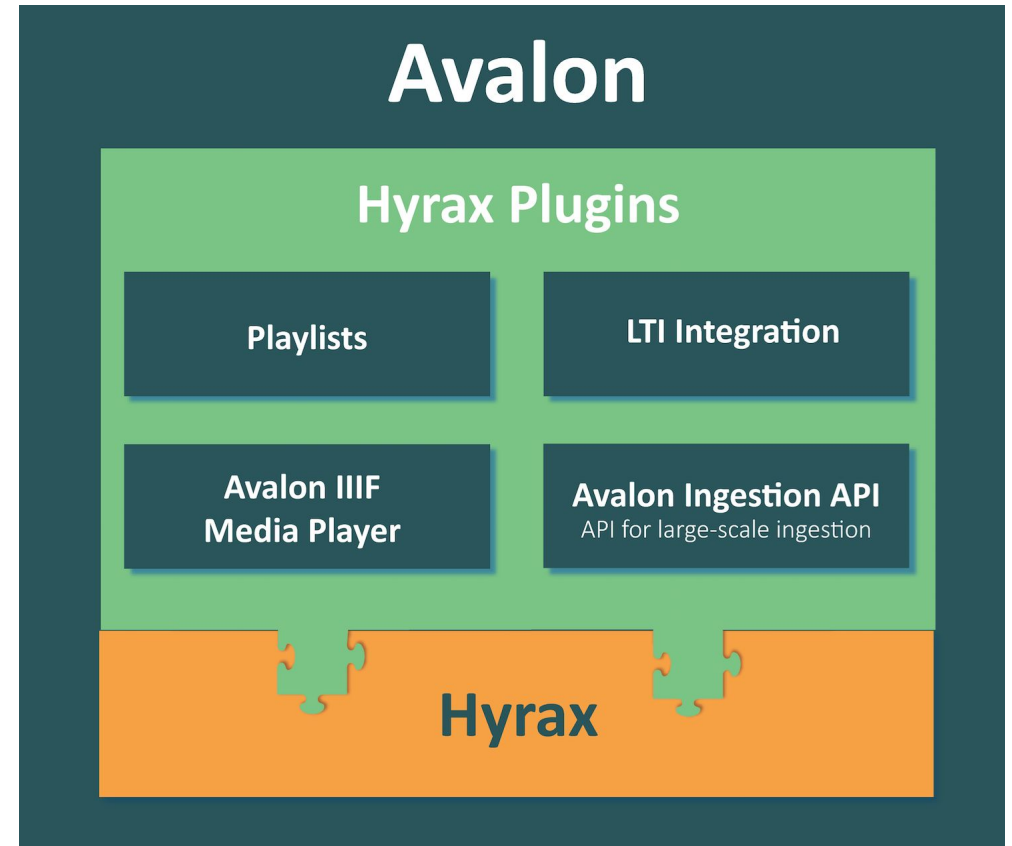
Community Work

- Collection Extensions
- Valkyrie
- External Files
- Other communities—IIF-AV



Small Components make a big solution bundle

- Use Hyrax as a starting point
- Contributions to Core, Plugins, Work Type, and Custom code
- Avalon bundles it all up



Small Components make a big solution bundle

- Embeddable IIIF-AV player
- Transcoding and streaming
- Playlists including segments and annotations
- Avalon-style leases
- LTI support (e.g. Canvas)
- Ingest API

Component: Embeddable IIIF-AV player

avalon
MEDIA SYSTEM

Avalon IIIF A/V MediaElement Player v.1.0

Note: Currently the master branch represents parsing of a manifest with the following structure: https://mallorn.dlib.indiana.edu/media_objects/0c483j54d/manifest To get started, copy and paste this url below and click 'Submit'. There's a current MediaElement4 / hls issue in this app which will only render one MediaElement player per page load.

Submit

Structured Links

- Lunchroom Manners
 - Getting Ready for Lunch
 - Washing Hands
 - Using Soap
 - Rinsing Well
 - In the Lunchroom
 - At the Counter
 - Getting Tray
 - Choosing Food
 - There will be cake
 - At the Table
 - Sitting Quietly
 - Eating Neatly
 - Leaving the Lunchroom
 - Cleaning Up
 - Putting Things Away

MediaElement 4 Player

Beginning Responsibility: Lunchroom Manners



<https://avalonmediasystem.github.io/avalon-iiif-player/>

avalon
MEDIA SYSTEM

Component: Transcoding and Streaming

Transcoding

- Preliminary support for ActiveEncode in hydra-derivatives
- External transcoding services (e.g. Amazon Elastic Transcoder)

Streaming

- From local (e.g. Wowza) or cloud (e.g. Cloudfront)
- External storage of derivatives
- Authorization enforcement

Component: Playlists

02:11

04:21

Add marker to playlist item was successful.

Chicago Style - Bing Crosby & Bob Hope [04:21]

▼ Markers

Name	Time	Actions
Evanston style?	01:10	<div>Edit</div> <div>Delete</div>
Avalon ❤️ Hyrax	02:10	<div>Edit</div> <div>Delete</div>

▶ Source Item Details

Autoplay ☐ Off

Copy Playlist

Edit Playlist

Share

🔗 Samvera Connect 2017

A playlist to rock Evanston!

1. I Want to Go to Chicago - Meredith Willson 🎵 03:25
2. Gone to Chicago (The Railroad Polka) - Meredith Willson 🎵 02:30
3. 🎧 Chicago Style - Bing Crosby & Bob Hope 🎵 04:21
4. Chicago the musical - CD 1 - Kander, John, Chicago - Act Two - 18. Track 18. Razzle Dazzle 🎵 04:19
5. American popular songbook for brass quintet - CD 1 - Dominic Spera, arr., City Symphony - Track 5. I. Chicago -- My Kind Of Town 🎵 03:30
6. The Sound of Chicago, 1923-1940 - Side 2 - Track 6. The Chicago Footwarmers, Get 'em again blues 🎵 02:50

Component: Avalon-style Leases

Item access

- ☒ Available to the general public
☐ Logged in users only
☐ Collection staff only

Assign special access

Avalon User* ?

Begin Date

End Date

Begin Date (yyyy-mm-dc)

End Date (yyyy-mm-dd)

Add

cjcolvar

×

mjgiarlo

Effective 2017-11-06 to 2017-11-10

×

Avalon Group* ?

Begin Date

End Date

Begin Date (yyyy-mm-dc)

End Date (yyyy-mm-dd)

Add

External Group* ?

Begin Date

End Date

Begin Date (yyyy-mm-dc)

End Date (yyyy-mm-dd)

Add

SamveraConnect2017

Effective 2017-11-06 to 2017-11-10

×

IP Address or Range* ?

Begin Date








End Date

Begin Date (yyyy-mm-dc)

End Date (yyyy-mm-dd)

Add

Component: LTI support



Account

Dashboard

Courses

Calendar

Inbox

Help

☰ MCO LTI Test > MCO LTI Test Course

2016

Home

Announcements

Assignments

Discussions

Grades

People

Pages

Files

Syllabus


Media Collections Online

Outcomes

Quizzes

Modules

Conferences

 INDIANA UNIVERSITY

cjcolvar | Sign out

Media Collections Online

Browse

Search

MCO LTI Test Manage Selected Items (2) Playlists

Successfully logged into the system

Browse By

Format

Moving Image 1

Main contributor

Date

Collection

Unit

You searched for: External Group > MCO LTI Test


Start Over

1 entry found

Sort by Relevance

10 per page

1. "Headless" metadata for library discovery: NYU's Ichabod project (33:56) ☐ Select



Date: 2015-06-09

Main contributors: Kassel, Carol; Pechekhonova, Ekaterina; Lovins, Daniel

Summary: Presentation at Open Repositories 2015 (OR2015), the 10th International Conference on Open Repositories, Indianapolis, Indiana, in session P3A: Integrating with External Systems.

Why?

- Push Hyrax and the community forward
- Forces us to focus on and inform community best practices
- Allows us to focus on our core strengths (AV) without rebuilding a modern product from the ground up
- Build a wider A/V community (Looking at you!)

In conclusion, I want to say there is no such thing as sustainable development. Community is the only thing in my experience that is sustainable. We all need to be involved in building communities, not focused solely on developing things.

- Winona LaDuke

The IMLS National Leadership Grant

- July 2017 -- June 2019 (#LG-70-17-0042-17)
- Integration of Avalon into the Samvera (Hydra) codebase
- Piloting a cloud-based version of Avalon with Lyrasis
- Improved media preservation
- Working with Artefactual Systems to integrate Avalon with the Archivematica platform
- Achieving a standardized delivery format
- IIIF AV interoperability spec and providing a demonstration implementation





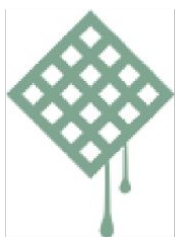
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github.com/avalonmediasystem



waffle.io/avalonmediasystem/



samvera.slack.com/messages/avalon