Day 1 ([Program](#))

Avalon Update

Samvera solution bundle for Audio/Video Access jointly developed by IU and NU from 2011-2020.
Supported by grants from the Mellon foundation and IMLS
Currently at Avalon 7.1

Two Releases: 7.0 & 7.1
IIIF and the Avalon IIIF Player.
Avalon Turnkey (Avalon on AWS)
Docker for Deployment / Development

Structural Metadata Editor

Transcoding

Removed OpenCast Matterhorn for ActiveEncode.
Includes dashboard for troubleshooting.

Collection Index and Landing Pages

Provides a little more information about collections. Upload your own custom art. Lets people coming in for the first time to an avalon site to be able to see all the available content in a way that's a little more meaningful than a blacklight facet with dozens or hundreds of items.

Avalon 7.1

Released March 19 2020.
Refining, enhancing and bug squashing for 7.0
API Updates
Styling
SME (?) updates.

Minio

S3 API Compatible object storage.

Ensures things don't break for file paths or mounts.

API

As people want to use content in the avalon instance and display structural metadata having a sane API which returns what you expect, has authentication, etc is a real bonus.

IIIF A/V

How do we model our manifests? What do we want to support?
As of Avalon 6.5 we've had the ability to get manifests from an Avalon item using a route. With the spec there are many ways to put your information in the manifest and they want to stay with and help develop community best practices.
How should their player consume manifests?

What Went Right

The new home page may require some set up and you might not want to roll it out immediately. Avalon will let you revert to the classic design.
Styling and visual improvements.
User feedback on marquee features is positive.

Not So Right

Styling changes are tricky, had to do a lot of changes and tweaks (7.1!)

Avalon IIIF Player

Still in active development in its own repository

What's Next

Avalon 7.2
1. Supplemental file support
   a. Can't currently upload or associate supplemental files. Things like PDFs which relate to this item, scores, etc.
2. Transcripts
3. Transcript view in item pages.

Avalon on Hyrax
1. Keep at edge of development.
2. Not tied to a version number.
3. Keep developing 7.x while resuming Avalon on Hyrax work.
4. Development reality: one foot in Hyrax, one foot in legacy.

Avalon Community

1. Monthly Avalon User Round-table
   (https://www.avalonmediasystem.org/avalon-round-table)
2. Forthcoming survey for implementers
   a. Who's using Avalon? In production? Testing out? What version?
3. Mailing list - low but steady traffic

Contact Us!

https://avalonmediasystem.org/connect

Hyku 2020: What's in Store for Samvera's Multi-Tenant Solution

Hyku Interest Group

Last thursday of each month at 11:00 AM EST. https://zoom.us/j/8584127749
Regular updates from partners & pilot projects:
1. Advancing Hyku - British Library, University of VA, Ubiquity
2. CommonKnowledge - Pacific University
3. Hyku for Consortia - PALNI/PALCI
4. HykuUP - Notch8
5. National transportation library 3.0 - US Dept of Transportation
6. Newman Numismatic Portal

Advancing Hyku

$1m 2-year grant funded by Arcadia. Supports advancing its functionality as an institutional repository and scholarly communication. https://advancinghyku.io

PALNI/PALCI IMLS Grant

Advance Hyku's multi-tenant functionality to work for consortia. Share workflows, share things across tenants, more options for creating unique theming/branding/interface at each tenant. Working with Notch8.

Bulkrax

Import/export framework for OAI/CSV/Bagit/XML.
Incremental updates are being contributed through ongoing projects, including more robust export support (Oregon Digital)

Service Solutions

Ubiquity Press (www.u-repo.io)
Notch8: HykuUP (www.hykuup.com)

Hyku Online

Website: https://hyku.samvera.org

Hyku Online: Roadmap

https://wiki.lyrasis.org/display/samvera/Hyku+Roadmap

Hyku Online: Projects List (WIP)

https://wiki.lyrasis.org/display/hyku/Hyku+Implementations

Follow Us!

groups.google.com/forum/#!forum/samvera-hyku
Hyku.samvera.org
Slack.samvera.org
Hyrax/Hyku Workshop: Aug 6/7? Updates soon.
Hyku interest group: Last thursday 8 pacific/11 eastern.

Hyrax Update

What's Hyrax

Opinionated configurable base for institutional and data repositories, digital collections management systems, etc. The goal is to be a broad set of the basic software the Samvera community puts out in a nearly box-like package.

It's a Rails engine, it serves as the core of various cars, amongst them being Hyku and a range of other applications people have developed on top of it.

Active Development

Focus on stability.
Active support for 2.x (currently: 2.7.2)
Hyrax 3.0.0 RC
Clean upgrades: Stay up to date as much as possible, report upgrade issues! They're working on clean upgrade paths. If it's 2.y and you're on 2.x, you should be able to upgrade without doing any extra work.

1. Long-term projects
    a. Valkyrie/Wings - talk about later.
2. DevOps Infrastructure
    a. CircleCI adoption.
        i. Samvera CircleCI plan is now unrestricted - no more job queuing.
    b. Application observability, e.g. /healthz
        i. Check out if your infrastructure is up and running in /healthz
    c. Bring back Containerization/Orchestration work to make it easier to bring up the stack in production.
3. Performance work.
    a. Caching infrastructure for IIIF Manifests has gone in - should speed up items with several parts.

Solar Vortex

Three-day dev congress in San Diego, January 2020
Broad participation, including virtual attendees.
Advanced:
1. Valkyrie work, in Hyrax and elsewhere
2. Rails 6 support in dependencies

Valkyrie/Wings

1. Still going on!
2. Work on replacing ActiveFedora with Valkyrie.
3. Wings is an adapter in Hyrax designed to make the transition easy.
4. Please switch your models to Valkyrie-native so they can find out what the gaps are.
5. See the Hyrax Valkyrie Usage Guide (https://github.com/samvera/hyrax/wiki/Hyrax-Valkyrie-Usage-Guide)

Getting Involved

Report issues, test versions, review code, submit PRs.
Talk to us in #hyrax or #dev
Hyrax Tech-lead is @no_reply
Hyrax Interest Group: Open to all, Slack: #hyrax-interest-group
Hyrax Maintenance WG: Sprinting once a month since July 2018. #hyrax-wg.

Questions

When is Hyrax 3 being released?
Soon! RC-2 will be released soon, normally allow RC-2 to be up for about 2 weeks.

Valkyrizing the Duke Digital Repository

Bullet Points

- Named DDR Evolution or DDREvo (Duke Digital Repository Evolution)
- No new functionality was developed.
- Kicked off in November 2018, shortly after finishing Hyrax based repository.
- Sprint 0 ended January 2019, followed by 16 two-week sprints by a four-person team.
- Final steps completed outside of sprint cycles, and a fifth developer joining the team.
- Separately did a new DDR home page.

Thanks Jim Coble!

- Moving from Fedora 3 to Valkyrie was a final gift from Jim Coble before retiring. Heard from Jim a few weeks ago and he said he was doing well.
- One of the first things Jim contributed was the original catalog in 1987.

Staff Resourcing & Motivations

- Started project before having approval because they knew they'd need all the staff time possible.
- Fedora 3 nearing end of life, ActiveFedora version no longer supported.
- Tried to migrate away to F4 in 2016 and was unsuccessful.

Why Valkyrie?

- Considered updating to latest Fedora. Subsequent versions of Fedora are quite different from 3, would take as much work as Valkyrie option. There are some options in latest version that had some concerns (data opacity etc.)
- Hyrax migration would be most mainstream. It would have been less of a clean refactor, spend more time working with stakeholders to map functionality. It would pull even more people's time into an already daunting project.
- Valkyrie option seemed like easiest. It was in labs at the time, but by the time they got everyone on board it was no longer in labs.

Timeline

1. Sprint 0/setup
2. Data model Refactor
3. Staff UI/Batch Operations
4. Migration Tools
5. Public UI
6. Production Setup

New Architecture

See slides when released. Ddr-models refactored to ddr-core, public UI is now ddr-xenon. Ddr-admin is a new staff interface.

Provided a new landing page to enhance navigation to three different repositories - hyrax for research data, DSpace open access repository, and the DDR.

Standardized headers/footers in multiple pages. Brings unity to staff who work on the services.

Conclusion

Massive repayment of technical debt. DREVO is the number one repayment of technical debt in the institution's history.

Questions

How many FTE (or equivalent) were necessary for this project?
4 developers + scrum master. Team worked for about 8 months. Jim spent all of his development time on the project.

Would you plan to consolidate your repositories in the future, and bring three repositories into a single one?
Waver between that reducing technical debt and not. There are things about DSpace that are important - it integrates into symplectic elements for one thing. If they were to do it they'd put a lot of effort into it.

Did you ever consider options outside Samvera?
Not really. They do periodical environmental scans and have not found any options they'd prefer out of Samvera solutions.

What will the connection be between the repositories and Folio?
For now those connections will be fairly tentative. The next version of the DDR will be a folio implementation - or at least that's how they expect it to evolve. Very long term. Many things can happen between now and then. The architecture of Folio is intended to be pluggable in that way.

Working Groups

https://docs.google.com/presentation/d/16bcbZeCZwmq3LS-Eu30K3EfgjaLPNBOT9A4IT45tiwY/edit#slide=id.p

React NPM module / dev environment starter package

Starter-react-component-npm

Github repo in samvera labs. Build and package a React component module.

Why?

Over the past year they've been working on API-driven applications.
Reusable UI has been of value.
To make reusable stuff (frontend react components), need to be able to build/test in a local development environment as well as package a module and make sure it works as expected.

Goals

Combine build/export into one project that's pre-wired with webpack, babel, and Jest.
Somewhat pleasant and expected development environment.
Be able to package and ship from within the project.
Keep it as simple as possible

Create React App?

Create React App is the official bootstrapping starter package from the react team.
Not intended for exporting components or building component libraries.
You get two repositories sharing the same code - it wasn't fun.

Other Alternatives

Storybook & React Styleguidist. Great for writing self-documenting components in isolated environments.
Both tools are good for smaller tightly focused components, such as UI concerned with display.
Buttons, dropdowns, etc.

Starter-react-component-npm is for non-trivial components

Examples: Avalon Structural Metadata Editor, OpenSeadragon React Viewer.
They're wrapped in an exportable component for convenience and portability.

How do I use this

Fork the repo (https://github.com/samvera-labs/starter-react-component-npm)
Update project metadata to yours.
Experiment with it.

Project Structure

There's a src directory for your code, and a demo directory for an example application.

Not using React?

No problem, swap React packages for your preferred. Patterns are applicable to other libraries.

Suggestions Please!

adam.arling@northwestern.edu
https://github.com/samvera-labs/starter-react-component-npm
https://github.com/samvera-labs/openseadragon-react-viewer

Questions

What components have been created from this package?
Structure metadata editor is the first one, and is in production in Avalon. Slowly starting to use this for components for a new product at Northwestern. Only the structural metadata editor is in production, and maybe the React IIIF Viewer.

React IIIF player (Slides)

What is it

ReactJS component rendering MediaElement.js player and structure navigation section.
Consumes a IIIF 3.0 manifest.

Technologies

MediaElement.js player for A/V playback.
JS portion of code was rewritten to ReactJS. Performance was improved, and building new improvements was made easier due to component infrastructure.
React Redux was used for state management.

Project Structure

Set up using the start-react-component-npm project.
All the code is in the src directory.
Demo directory makes development easier.

Manifest Parsing

Uses manifesto.js to parse manifests.

Testing

Comprehensive test suite using Jest & React testing library. Many unit tests and a few integration tests.

If you want to test it on your manifests, use
https://avalonmediasystem.github.io/react-iiif-media-player

Do not yet support IIIF Auth in this component.

How can I use it?

IIIF Media Player is an exportable Yarn/NPM package. "React-iiif-media-player"
"yarn add react-iiif-media-player / npm install react-iiif-media-player"

Latest changes aren't currently released to NPM, but hope to release it as soon as possible.

Hyrax and Archivematica: central to implementing digital preservation workflows

(Sorry y'all, I have to step away from notetaking, if someone can take over.)

Day 2 (Program)

Inter-institutional Spikes: Exploring Elixir (Slides)

Princeton and Northwestern partnered on trying out Elixir, ElasticSearch, deployment tools - creating space to experiment with new tech (thinking long term after Ruby is not used/useful)

https://github.com/samvera-labs/digital_collections_elixir_example/projects/1

Set this up as a 10 day sprint, planned out collaboration and partnering

Pomodoro Pairing technique for programming work -
https://medium.com/ingeniouslysimple/pair-programming-with-tomatoes-fba29ed23be3

Reviewed Liked, Learned, Lacked, Longed for at end of sprint

Benefits on both sides of collaboration

Questions

Trey mentions that the Princeton team is looking to use Elixir actively in a project. I wonder what Trey and Michael think makes for a good Elixir project (vs., say, a good Ruby project).

New project for Princeton, trying things out. Northwestern using Elixir for a while now and would only use Ruby if legacy code or Ruby library required

A Hykurax Projects Panel: Advancing Hyku, Hyku for Consortia, and Hyrax Analytics Leads

3 concurrent projects - grants all due around same time so lots of commonalities have been discovered between these projects

Slides for Hykurax Panel
https://docs.google.com/presentation/d/1aXkALWEzYBVmNRCn9Hm1DYkIczdu3Nkp2ucOT2nXNA4/edit#slide=id.g803eb08c6c_2_19

Advancing Hyku

https://advancinghyku.io

Deliverables also include multi-tenant work from British Library and architecture review from BL

Hyku for Consortia

PALCI and PALNI
Working on collaborative Institutional Repository

Working on testing Hyku and improving it to support consortial multi-tenant use - share users, permissions, need to decouple groups from roles; Wordpress-style themes for UI designs for tenants to pick from

ETD and OER work types have been created; adding commenting feature

Upcoming features - DOI integration, cross-tenant search, multi-tenant shared works, sharing code back to Hyku community

Starting development sprints now through September with Notch8

Hyrax Analytics

Oregon Digital (Oregon State University and University of Oregon)
Work getting started now
Ubiquity working with British Library on things that align with both PALNI/PALCI multi-tenant work and analytics work from Oregon Digital

Questions

Do you have a link to the Pacific Univ Hyku instance?
https://commons.pacificu.edu/

Creating javascript components to provide rich user experiences for search and browse

Use cases - needed to expose collections and supply collection context

El Colegio de Mexico using Hyrax - FrontEnd components based on VueJS
Avalon Media System - React components

Both want to make components more easily reusable in different contexts

Might want to consider building shared set of Samvera JS components

Questions

Have you used or looked at things like Elastic SearchUI or AppBase's ReactiveSearch components? If so, was it easier to spin up your own?

VueJS very lightweight so that is why it was used
Avalon used this as way to get other developers familiar with React who weren't yet already

What is overhead for the client browser of using JS instead of the back end server?
(didn't get response noted)

Enhanced Preservation, Fewer Migrations: Fedora 6 and the Oxford Common File Layout

OCFL is being used by Fedora but also used by others so it isn't just a Fedora thing

Fedora 6 including OCFL support

Questions

That is a much nicer organization to the data files using OCFL. Which standards is OCFL consistent with?

NDSA and OAIS (at least consistent with those preservation standards)
OCFL spec is not quite at 1.0 release so any other standards that need to be considered would be welcome.

Does mirroring intellectual structural metadata in the file storage, export structual metadata issues/diffculties onto the file storage doamin? I.e. I need to solve/decide what a complete intellectual item/object is before saving the files for it.

Don't have to know complete contents of an object before saving. Can create and save an object knowing you are adding more content to it later, that's fine. The object is versioned and OCFL can handle that.

If you write files directly to the OCFL file structure instead of using Fedora API, do you then need to do the rebuild and is that a lengthy process?

Exploring this now (side-loading use case). Fedora functionality not finalized yet so interested to know more about use case. Send along to David Wilcox.

Using API-Ingest for Avalon

3rd party digitization is definitely helped by API ingest

Relevancy and the Creation of Shared Meaning

DCE working with Emory University

Staff-facing repo based on Hyrax
Public end user interface based on Blacklight

Relevancy - what is included, and excluded, from search results, is default to OR or AND search terms, how are search results ranked, can be user-dependent

Example search term: instrument
Variety of results of varying kinds of instruments, musical instruments being the actual relevant search

Audience for music group: record has cataloged "African American musicians" but photograph shows audience as white audience - that information is not available for searching/discovery (default/unmarked subjects) - unmarked and default view, concepts left out, often reveal dominant group

Different relevancy levers can be applied to help users retrieve the most relevant results (Solr changes, cataloging practices)

Questions

What was the process for developing the relevancy test suite?

Direct interaction with system and collection, use yourself as user to begin, see what happens - are results what you expect?
"Civil Rights" spec - testing on a term that should be relevant or have a particular expected relevancy and see if results fit (RSpec and JMeter)

Developer way to decolonize the catalog - something metadata folks are working on as well

Samvera Connect 2020 Update

Not happening in-person (would have been at UCSB)

Will have online meeting this fall - open to new ideas and suggestions
2 week event with each day being short (4 hours max) - mix of live with Q&A and pre-recorded with live Q&A
Trying to figure out online workshop feasibility, other formats seem more doable
Social gatherings - different time zones impact (8 time zones that we know about)
Accessibility and staffing/platform resources

Live Polling to ask about usefulness of different parts of previous Samvera Connects

What would you add to the Connect 2020 virtual program?
samvera-connect-2020@googlegroups.com

Poll will also be sent to community for response

Comments

Track for specific audiences (Marketing WG interest in AUL track)
hands on dev is always useful

Tom Johnson - I really wants to figure out how to plan a multi-day virtual dev congress (or even a Dev Connect) i'm not sure if that needs to be attached to Connect in the fall, or if it's better separate