Samvera Virtual Connect 2019 Program

> ⓘ **Samvera Virtual Connect 2019** took place on Tuesday, April 23 and Wednesday, April 24, 2019.
> Watch a video recording of the event or view presentation slides and community notes via links below.
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Day 1: Tuesday, April 23, 2019 (Recording)

11:00-11:05 AM EDT	**Day 1 Welcome and Housekeeping** Slides Ryan Steans (Northwestern University)	5-minutes	All Audiences

Community ity Updates Community Notes	7-minute lightning talk, followed by 3 3-minute updates	
11: 06 - 11: 13 ED T **Samvera Steering Update** Slides Richard Green (Consultant to the University of Hull & Chair, Samvera Steering Group)	The Chair of the Samvera Steering Group will discuss the work of Steering in a year of change. This discussion will cover the recent changes in the structure of Steering and efforts to increase transparency, along with a brief discussion of topics and issues that Steering is working on this year with the Samvera Community.	All Audience s
11: 14 - 11: 17 ED T **Samvera Roadmap Council Update** Slides Jen Young (Northwestern University)	A brief update on the work the Roadmap Council has done and will do since being constituted in October 2018.	All Audience s
11: 18 - 11: 21 **Samvera Fundraising Working Group Update** Slides Karen Cariani (WGBH)	An update on the activities of the Samvera Fundraising Working Group.	All Audience s

11: 22 - 11: 25	**Samvera Marketing Working Group Update** Slides Chris Awre (University of Hull)	We wish to share the ongoing work of the Samvera Marketing WG following its initiation in 2018. The goal for this year is to raise awareness of Samvera amongst different audiences that Samvera works with, both within our organisations and with potential new members of the community. Ideas, as ever, of what sells Samvera for you are welcome!	All Audience s
	Presentation #1 Community Notes	30-minutes (including Q&A)	
11: 26 - 11: 56	**M3 and Hyrax: Bringing Flexible Metadata to the Samvera Community** Randall Floyd (Indiana University) Julie Allinson (Co-Sector) Ned Henry (UC Santa Cruz)	If you're a developer or metadata specialist involved in building or managing a Hyrax based application, you may have discovered that developer time is required just to add new fields to Work Types or alter the behavior of existing fields in Hyrax edit forms and views. There are currently no features within Hyrax that allow for easy configuration-based metadata, so changes are required in multiple places to the code to accommodate needs beyond the core profile provided. This presentation will provide a glimpse into collaborative work currently underway that could be used as a basis to solve this problem for the Samvera community. We will begin by summarizing some individual efforts to introduce "configurable metadata", such as Houndstooth, Scooby Snacks, Dog Biscuits, and Archetypes. We will then touch on the collaborative team that has emerged from those efforts - the Machine-readable Metadata Modeling Working Group, or M3 - which is currently working to develop a draft specification for a common format for metadata modeling. Finally we will provide an overview of how this specification could be used to develop a common feature to allow for more flexible and configurable metadata in Hyrax.	Develope rs, Metadata Specialis ts
	Day 1 Lightnin g Talks Community Notes	7-minutes each	

11: 57 - 12: 04	**Rethinking metadata design and management** Slides Arwen Hutt (UC San Diego) Ruth Tillman (Penn State)	For metadata specialists, creating metadata profiles, system requirements, and accompanying documentation often feels like a game of whack-a-mole. Current practices and technologies also mean comparing your profiles with another institutions' is an enormous hassle. To address this problem, developers and metadatists came together to create the machine-readable metadata modeling (M3) specification. This presentation will offer some history and use cases for the specification, an update on its current status, and where to learn more.	Metadata Specialists
12: 05 - 12: 12	**Making Hyrax more inclusive through controlled vocabulary choice** Slides - PDF Julie Hardesty (Indiana University)	What if the Hyrax web application were to support and include, by default, controlled vocabularies from marginalized communities? Currently Hyrax supplies a default set of descriptive metadata fields for describing uploaded objects. This set of fields includes Keyword (a required field) and Subject (an optional field). Neither of these fields are controlled by a vocabulary of terms upon install. The Questioning Authority (QA) gem exists as an option to configure and apply controlled vocabularies for use with fields such as these in Hyrax. While QA can be configured to work with nearly any vocabulary, the current vocabularies offered through the gem when it is installed include LCSH/NAF/GFT/MPT/DGT, FAST, Geonames, MeSH, Agrovoc, DBPedia, NALT, and Getty (AAT, TGN, ULAN). These are widely used mainstream sources for topical subject and genre description but also tend to reflect the current dominant mainstream power structure in the United States (white, male, straight, able-bodied, middle-class, Christian, Anglo). Should we increase the list of vocabularies available, by default, in the QA gem? Should we go beyond that and enable vocabulary choices on the default Subject and Keyword Hyrax fields? This lightning talk will discuss these questions and consider vocabulary options that would provide more inclusive descriptive capabilities.	Developers, Repository or DAMS Managers, Metadata Specialists

12: 12 - 12: 20	**From Institutional Repository to Digital Collections Management: Replacing CONTENTdm with Samvera/ Hyrax** Kathryn Michaelis (Georgia State University Library) Jon Bodnar (Georgia State University Library)	Since May 2018, the Georgia State University Library has been developing an instance of Samvera/Hyrax to replace CONTENTdm for digital collections management. After using CONTENTdm for more than a decade, certain features have become indispensable to our digital collections' workflow. A key part of our development effort has been deciding which features to build into (or to remove from) Samvera/Hyrax. In this presentation, we will discuss how we have balanced updating and preserving workflows, and we will review some of the features we are implementing, including support for controlled vocabularies, oral history ingest and display, and bulk uploading.	Repository or DAMS Managers, Metadata Specialists, Administrators
12: 21 - 12: 28	**Introducing NewspaperW orks** Slides Eben English (Boston Public Library)	This talk will discuss NewspaperWorks, a gem that provides content models, batch ingest tasks, and front-end functionality for digitized newspaper content. The gem is intended to be installed in a Hyrax-based repository application, and can be used to add newspaper content to an existing repository, or create a stand-alone newspaper content interface.	Developers, Repository or DAMS Managers, Metadata Specialists, Administrators
12: 29: - 12: 36	**Avalon Media System Update** Jon Cameron (Indiana University) David Schober (Northwestern University) Ryan Steans (Northwestern University)	This presentation will cover Avalon progress from the past year focusing on new features that will be available in both Avalon 6 and 7. In addition to discussion of core components such as Batch Ingest, Transcoding, and IIIF manifest generation, the team will showcase new features available on Avalon 6 (with eyes toward 7) such as OHMS integration, the Timeliner and the Structural Metadata editor. We will give an update on planned work such as design for Avalon 7, playlists, user management features, and permissions as we work toward building Avalon 7.	DevOps and System Administrators, Repository or DAMS Managers, Metadata Specialists, Administrators

12:37 - 12:44	**Structural Metadata Editor component for audio and video clips** Slides Adam Arling (Northwestern University) Dananji Withana (Indiana University)	Avalon Media System is upgrading it's UI component for handling structural metadata editing for an audio or visual work. The user can select and organize timespans in an AV work by manually typing bounding times and titles, or by interacting with a visual representation of the waveform. Technologies used are Peak.js and ReactJS.	Developers, Repository or DAMS Managers, Metadata Specialists, Administrators
12:45 - 12:54	**Hyku: a multi-tenant, ready-to-ship Samvera implementation** Slides - PDF Kevin Kochanski (Notch8)	An introduction to Hyku. Hyku is a collaborative product that extends existing Samvera codebase in order to build, bundle, and promote a feature-rich, robust, flexible digital repository. Hyku's chief benefits are ease of installation, configuration, and maintenance.	Repository or DAMS Managers, Administrators
12:55 - 1:10	Lightning Talk Q&A	15-minutes for lightning talk questions and answers	All Audiences
Day 1 Break		20-minutes	
Presentation #2 Community Notes		30-minutes (including Q&A)	

1:30 - 2:00	**How Multi-tenant works in Hyku** Slides - PDF Rob Kaufman (Notch8)	We'll go over the Apartment gem, what it means and how it is integrated in the the multi-tenant structure of Hyku.	Developers, DevOps and System Administrators
	Working & Interest Group Updates Community Notes	3-minutes each	
2:01 - 2:22	Round Robin Reports Slides	We'll hear updates from the following groups: **Samvera Metadata Interest Group Update** - Julie Hardesty (Indiana University) **Samvera URI Selection Working Group** - Ryan Wick (Oregon State University) **MODS to RDF Working Group** - Eben English (Boston Public Library) **Machine-readable Metadata Modeling Specification (M3) Working Group** - Arwen Hutt (UC San Diego) **Samvera Geospatial Predicates Working Group** - James Griffin (Princeton University) **Newspapers Interest Group Update** - Eben English (Boston Public Library) **Repo Managers Interest Group** - Nabeela Jaffer (University of Michigan)	All Audiences
	Day 1 Closing Ryan Steans (Northwestern University)		All Audiences

Day 2: Wednesday, April 24, 2019 (Recording)

11:00-11:05 AM EDT	**Day 2 Welcome and Housekeeping** Slides Ryan Steans (Northwestern University)		All Audiences
	Presentation #3 Community Notes	30-minutes (including Q&A)	
11:06-11:36 AM EDT	**Samvera headaches: the choice between flexibility and ease of maintenance with multiple and multipurpose repositories** Slides - PDF Richard Higgins (Durham University Library) Olli Lyytinen (Durham University Library)	The presentation would start with a demonstration of the Samvera heads that we have developed for deploying and managing IIIF at Durham, looking particularly at what has worked and what has stretched the underlying Fedora repository to breaking point. In parallel we have developed a research data system based on Sufia and have now reached the stage where we need to either bring these systems together into a single package, or identify a clear break between where we should follow standard packages such as Hyrax and where local implementations are required. With developments like Valkyrie and the Oxford Common File System also imminent, it becomes tempting to just wait until they are released, further complicating the planning process. It would be interesting to end with a discussion of the relative benefits of converging on one stable head or having a system that fulfills all institutional requirements, so this might work as part of a themed group of presentations.	Developers, DevOps and System Administrators, Repository or DAMS Managers

	Day 2 Lightning Talks Community Notes	7-minutes each	
11:40-11:47 AM EDT	**Pairing: why, when, how** Slides - PDF Anna Headley (Princeton)	I'll present the many contexts in which pair programming can be beneficial in different ways, reasons to use pairing as part of the regular practice of your team, the basic mechanics of how pairing works, prompts for staying mindful of power dynamics while pairing, and ideas for introducing the practice to a team that has never really done it before.	Developers, Administrators
11:48-11:55 AM EDT	**Fedora 6.0 and the Oxford Common File Layout** Slides - PDF David Wilcox (DuraSpace)	For the past several years the Fedora community has prioritized alignment with linked data best practices and modern web standards. We are now shifting our attention back to Fedora's digital preservation roots with a focus on the Oxford Common File Layout (OCFL). The OFCL is an application-independent approach to the storage of digital objects in a structured, transparent, and predictable manner. Fedora 6.0, the next major release, will replace the current ModeShape backend with a more scalable and performant implementation that persists data in accordance with the OCFL specification. This presentation will provide an overview of the Fedora 6.0 design, including an introduction to the OCFL and how it will be implemented. It will be of interest to Samvera community members who want to track Fedora developments and understand their impact on Samvera applications.	Developers, Repository or DAMS Managers
11:56-12:03 PM EDT	**Valkyrie Update - 2.0 and beyond** Slides Trey Pendragon (Princeton University) Carolyn Cole (Princeton University)	This will be a shorter presentation to give an update on changes to Valkyrie since Samvera Connect, as well as provide some guidance on when 2.0 will be released and what to expect.	Developers, Administrators

12:04-12:11 PM EDT	**Timeliner tool in Avalon** Slides Chris Colvard (Indiana University) Brian Keese (Indiana University)	The Timeliner is a pedagogical tool that was available in the old Variations application, the Avalon predecessor. It allows for a visual representation of the structure of an audio file or fragment. The tool, which will be made available as a standalone, has been reimplemented using IIIF Presentation API v3 for the presentation layer and the IIIF Auth protocol for the integration with Avalon. We will show the tool and also discuss the technical aspects of the IIIF standards.	Developers, Repository or DAMS Managers, Administrators
12:12-12:19 PM EDT	**Hyrax Batch Ingest: A gem in use** Slides - PDF Sadie Roosa (WGBH)	A quick look at how WGBH is using the hyrax-batch_ingest gem in their AMS app for multiple shapes and sizes of ingest.	Developers, Repository or DAMS Managers, Metadata Specialists
12:20-12:27 PM EDT	**An approach to File CRUD and attachment APIs** Sean Upton (University of Utah J. Willard Marriott Library)	Attaching files in Hyrax for purposes of ingest and other programmatic use is complicated. This talk describes some challenges around file attachment, generally, and presents a wrapper API with simpler calling semantics both for access and attachment of primary and derivative files (and abstraction of associated operations usually buried in the actor stack or asynchronous jobs). The adapter components providing this simple interface provide a uniform and succinct way for multiple ingests to have consistent behavior. This brief talk will present the proposed "assign and commit" calling semantics around file attachment, and make the case as to why this approach is the best fit for how Hyrax and associated stack components implement file attachment process. These components have been developed as part of the IMLS-funded Historic Newspapers in Samvera project.	Developers, DevOps and System Administrators, Repository or DAMS Managers, Anyone building ingest processes
12:28-12:35 PM EDT	**Amazon ElasticTranscoder in Hyrax** Phuong Dinh (Indiana University) Chris Colvard (Indiana University)	We are going to show how to ingest audio and video files using Amazon ElasticTranscoder with Hyrax through active_encode.	Developers, DevOps and System Administrators

12:36-12:43 PM EDT	**Implementing Custom Theme Solutions in Hyku** Slides - PDF Lea Ann Bradford (Notch8)	Notch8 recently implemented custom theming for the PALNI/PALCI joint Hyku project. This talk will go over how we installed access to Google fonts as well as a code editor gem to enable each tenant in the project to write its own CSS. This allowed for much expanded customization and theming experience.	Developers
12:44-12:51 PM EDT	**Implementing an Alternative Rails-based Digital Collections Architecture** Jonathan Rochkind (Science History Institute)	At the Science History Institute (formerly Chemical Heritage Foundation) we are working on re-implementing our digital collections application using a new Rails-based architecture, including sharing some building blocks in a ruby gem for those who may be interested in the same directions. Our code is not based on hyrax or valkyrie; our persistence layer is based on postgres, ActiveRecord and metadata serialized in a JSON column. The sharable gem code already includes support for flexible derivatives; file handling using shrine; and some HTML form support for complex/repeatable fields. It will in the future include some solr indexing support. These components are designed for flexibility and support of performant DB usage patterns. This talk will provide a fast-paced tour of our architecture by showing example code.	Developers, DevOps and System Administrators, decision-makers for technical architecture/ platform choices
12:52-1:08 PM EDT	Lightning Talk Q&A	15-minutes for lightning talk questions and answers	All Audiences
1:09-1:29 PM EDT	**Day 2 Break**	20-minutes	
	Presentation #4 Community Notes	30-minutes (including Q&A)	

| 1:30-1:59 PM EDT | **New Directions for Northwestern: Taking a Cloud-First Approach**
 Slides

 Michael B. Klein (Northwestern University)

 Adam Arling (Northwestern University)

 Karen Shaw (Northwestern University)

 Brendan Quinn (Northwestern University)

 David Schober (Northwestern University) | Northwestern University Libraries is currently running Samvera applications in production. Three of these are developed, maintained, and managed by the Repository & Digital Curation workgroup:

 • Arch, an Institutional Repository, based on Hyrax 2.4.1
 • AVR, Northwestern's audiovisual repository, based on Avalon 6.3
 • DONUT, the staff-facing ingest interface for the digital object repository, based on Hyrax 2.4.1

 In developing and deploying these applications, we have encountered (and mostly overcome) numerous stumbling blocks relating to performance, scalability, customization, and assumptions about the deployment environment and infrastructure on which the apps will run. While we have found it possible to shoehorn the Samvera stack (as it exists today) into our Amazon Web Services cloud-based deployment environment, we have also started to investigate the rewards and compromises involved in taking a cloud-first approach to our next generation of tools. We have identified several basic tenets for this approach so far:

 • If AWS offers a native Software-as-a-Service (SaaS) solution for a particular problem, use it (e.g., choose ElasticSearch/Cloud Search over Solr)
 • Avoid virtual server instances that run 24x7 waiting for requests/work
 • Do not assume there is a local filesystem to work with
 • Optimize startup time so that units of work can be spawned and killed as needed
 • Constantly assess and reassess every unit of work for scalability, repeatability, and idempotence
 • Keep data portable and code adaptable, but don't over-stress about vendor lock-in

 In this presentation, members of the Repository Development & Administration Team will present on lessons learned from 7 years of working with Samvera, Avalon, and Hyrax, what the future holds for our next round of in-house development, and the opportunities & compromises our cloud-first approach creates regarding our use of and contributions to the larger Samvera community. | Developers, DevOps and System Administrators, Repository or DAMS Managers |
| **Presentation #5**
 Community Notes | 30-minutes (including Q&A) | |

2:00-2:29 PM EDT	**U-M Digital Collections by the Numbers** Slides - PDF John Weise (University of Michigan)	6,761,224,773 words. 2,823,957 images. 200+ content sources. And a very long tail of unique metadata fields. This will be a "by the numbers" tour of the digital collections at the University of Michigan Library that highlights some of the challenges of designing and building a new repository and access system for our digital collections that can handle scale, variety, growth, and a rich feature set.	Developers, Repository or DAMS Managers
	Day 2 Closing Ryan Steans (Northwestern University)		All Audiences