



Samvera

**Introduction to Community,
Technology, and Value**

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**Washington University in Saint Louis
Samvera Connect**

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samvera



Let's Start with You

- Introductions
- What are your goals for this workshop?
- What interested you in Samvera?
- What are some things you would like to know more about?



What we'll cover

- What is Samvera?
- How We Work
- Example Sites
- The Technology
- Hands-On
- The Samvera Pitch
- What Next?
- Q & A



Samvera Overview

what is it?

what does it do?

why is it different?



What is Samvera?

- A robust repository fronted by feature-rich, tailored applications and workflows
- Collaboratively built “solution bundles” that can be adapted and modified to suit local needs.
 - e.g. Hyrax, Avalon, etc.
- A community extending and enhancing the solutions
 - *If you want to go fast, go alone. If you want to go far, go together.*



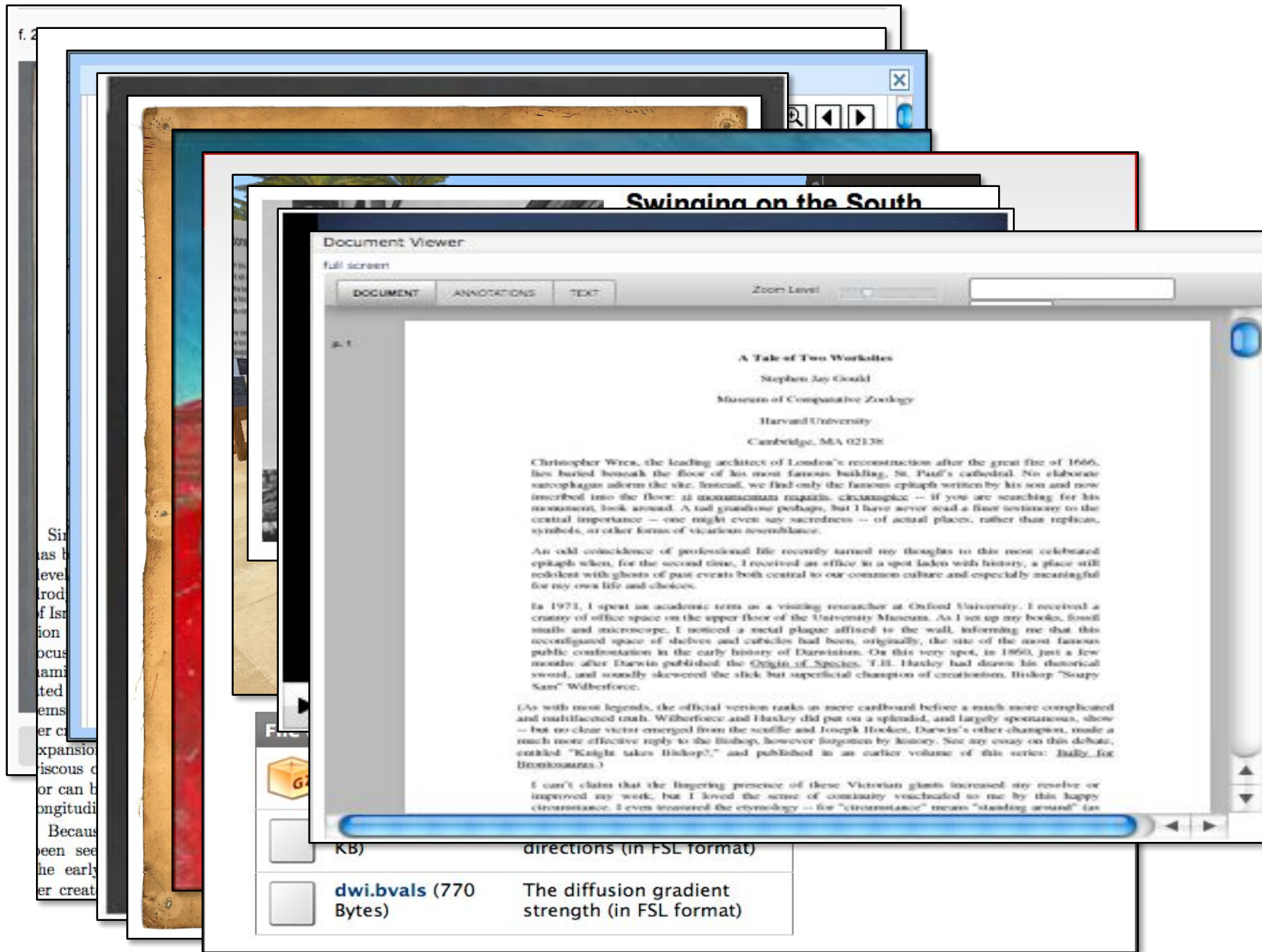
Why Samvera?

- Need a flexible, rich, robust repository solution
- Be part of a community
 - Shared resources, shared risk, shared advances
- The whole (we) is greater than its parts (each of us)
 - Especially in this crowd
- Control your own destiny
- Build institutional capacity



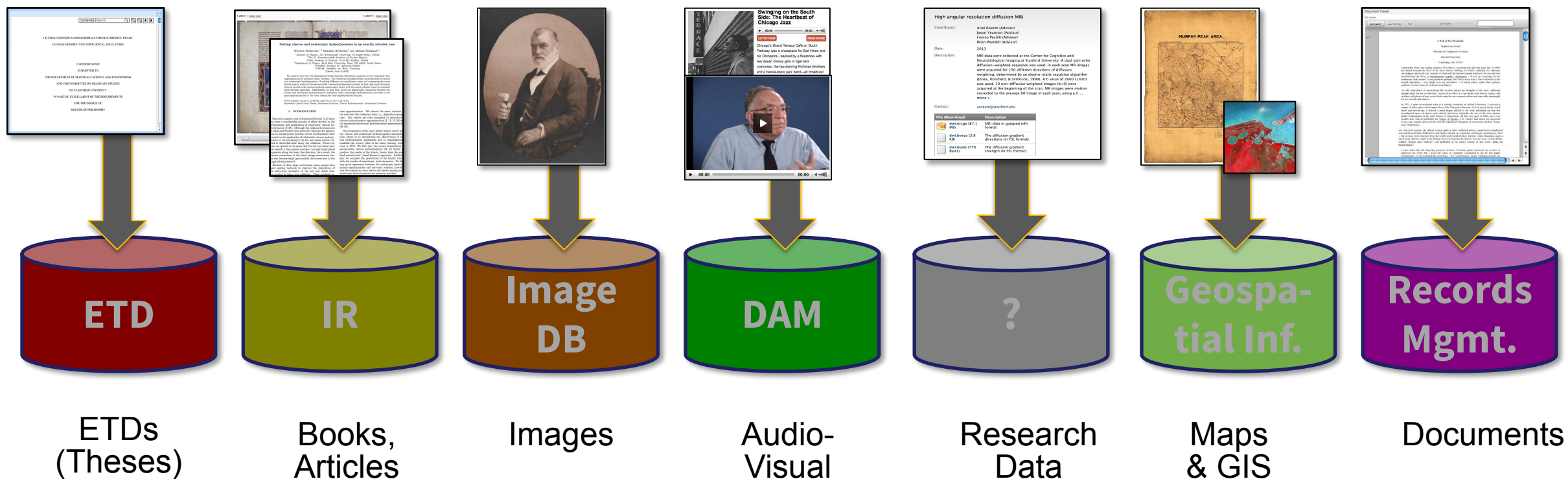
Fundamental Assumption #1

No single system can provide the full range of repository-based solutions for a given institution's needs,
...yet sustainable solutions require a common repository infrastructure.



Books
Articles
Theses
Images
Maps
Data (Raster)
Data (Comp.)
Data (Observ.)
Audio
Video
Documents

Point Solution Approach - Welcome to Siloville



Management

Access

Preservation?

Effective?

Sustainable?

Repository Powered Approach

ETDs
(Theses)

Books,
Articles

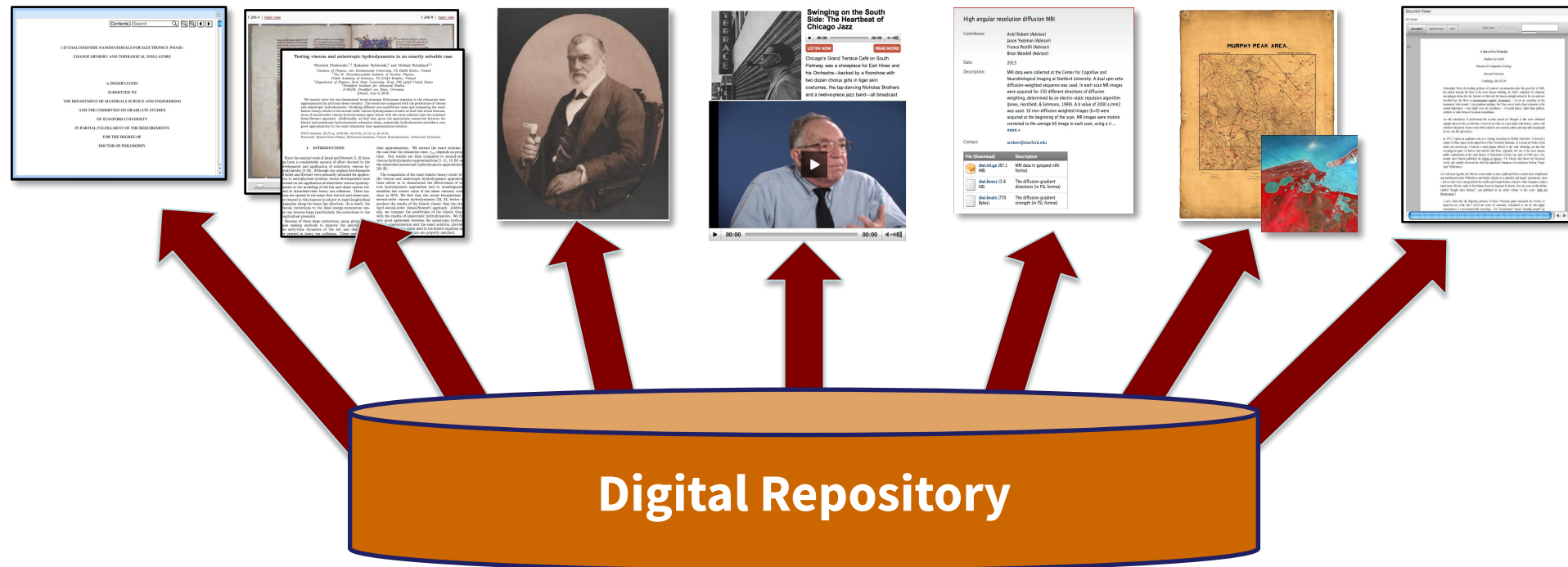
Images

Audio-Visual

Research Data

Maps
& GIS

Documents



Scalable, Robust, Shared
Management
and Preservation Services

If you want to go far, go together!

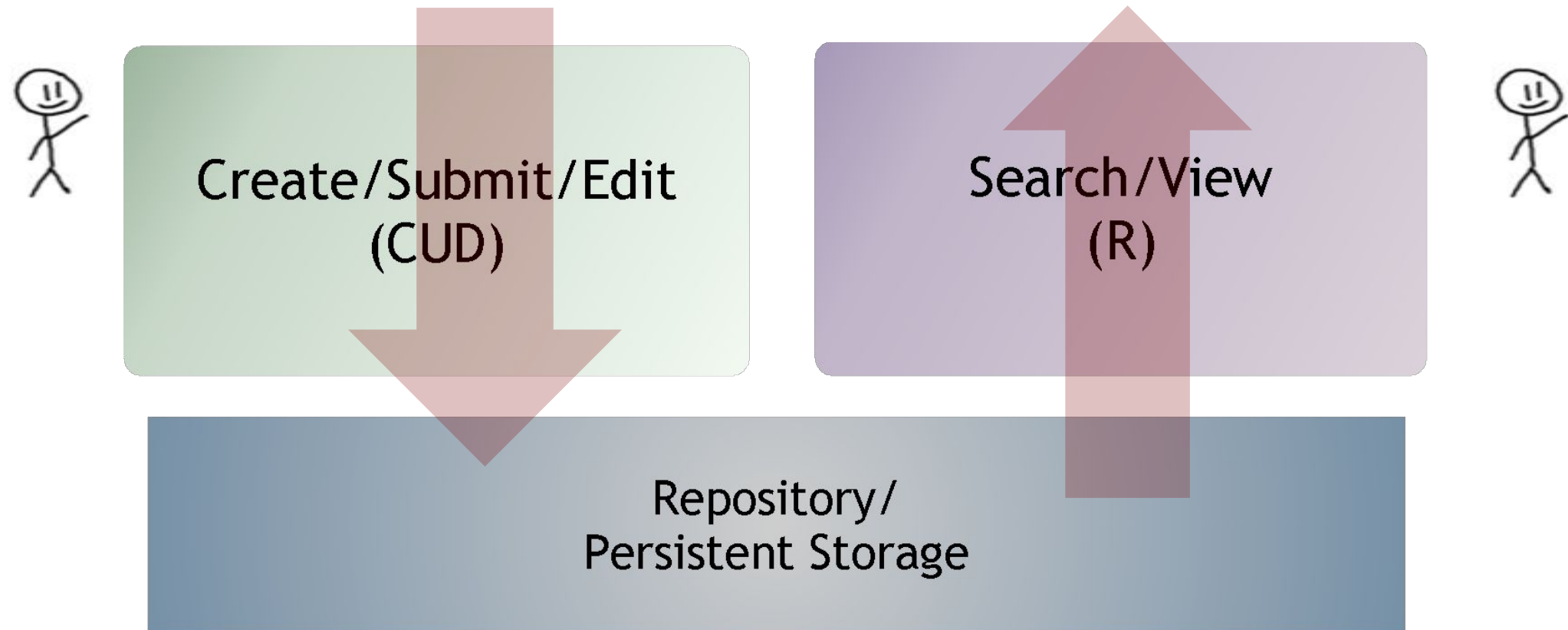
CRUD in Repositories

Create/Submit/Edit
(CUD)

Search/View
(R)

Repository/
Persistent Storage

CRUD in Repositories





Used by:

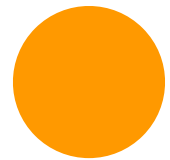
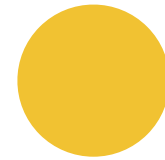
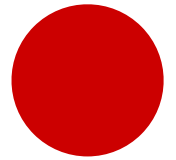
- Large Universities
- Small Universities
- Colleges
- Public Broadcasting
- Government Ministry
- National Libraries
- National Lab
- Small Research Labs
- National Digital Repository
- Statewide Digital Libraries
- Science History Institute
- Museum of Performing Arts
- A Shakespeare Festival

Used for:

- Self-deposit system
- Digital Collections System
 - Sheet Music
 - Architectural resources
- Electronic Theses & Dissertations
- Digital Image System
- Media Management
- Media Preservation System
- Research Data Management
- Digitization Workflow System
- Digital Preservation System
- Digital Archives System
- Library Monograph Acquisitions System
- And more!

Next Up:

How we work



How do I get involved?



Fundamental Assumption #2

No single institution can resource the development of a full range of solutions on its own,

...yet each needs the flexibility to tailor solutions to local demands and workflows.



Samvera Philosophy: A Community

- An open architecture, with many contributors to a common core
- Collaboratively built “solution bundles” that can be adapted and modified to suit local needs
- A community of developers and adopters extending and enhancing the core
- “If you want to go fast, go alone. If you want to go far, go together.”



The Samvera Way

- Not a directed project
- Investment in a **community**, not a vendor
 - Contributions back to community: training, documentation, modeling, evangelism, support
- Investment in a **framework**, not an application
 - Contributions back to core code base
- Travel / face-time



Community

- Conceived & executed as a distributed, collaborative, open source effort
- Initially a joint development project between Stanford, Univ of Virginia, and Univ of Hull
- Samvera Partners are the backbone of the project
 - Coalition of the willing
 - No fees or dues (thus far)
 - Apache-style consensus and governance
- Steering Group provides administration, continuity, and serves as backstop
 - But no central planning, no Project Director, no “one” architect



Samvera Partners

...are individuals, institutions, corporations or other groups that have committed to contributing to the Samvera community; they not only use the Samvera technical framework, but also add to it in at least one of many ways: code, analysis, design, support, funding, or other resources.

Samvera Partners collectively advance the project and the community for the benefit of all participants.

Community Structure

- ❖ **Steering Group** (elected by partners)
Stewards of the project - individual membership
- ❖ **Partners** (Institutional)
Formally committed institutional membership
- ❖ **Working & Interest Groups**
Topically aligned groups that span organizations & roles
- ❖ **Committers**
Developer community
- ❖ **Community adopters**



Get Involved: Many Hands Make Light Work

- Getting involved with Samvera can be at different levels:
 - Adopter
 - Developer
 - Partner
- Need to ask:
 - What involvement is required to enable you to meet your needs?
- But also,
 - If we contribute back, what more do we gain?



Training & Connecting

- **Good**: read the documentation and learn-by-doing
- **Better**: connect through social channels
 - Email lists, Slack, weekly phone calls
 - Github interactions
- **Best**: meet in person. Face time fuels collaboration!
 - Samvera Connect: annual, worldwide, community meeting
 - Samvera (Partner) meetings: 3-6 ad hoc, topic-based meetings per year (usually)
 - Regional Groups: convening ad hoc



Community Resources

- **Website** - Introduction to the community: <https://samvera.org>
- **Wiki** - Broad range of information types:
<https://samvera.org/wiki>
- **Github** - Code, code wikis, technical details:
<https://github.com/samvera>
<https://github.com/samvera-labs>
<https://github.com/samvera-deprecated>



Stay Connected

- [Website](#)
- [Wiki page](#)
 - Partner meeting agendas & notes
 - Events & Details
- Monthly Partner calls
- Partner listserv
- Samvera Partner meetings & Samvera Connect
- Identify a Samvera Partner doing similar work and get in touch
- Participate in an Interest Group or Working Group
- Identify need for vendor input and make contact to discuss options
- **Come to events (like this one!)**



Interest & Working Groups

- [Component Maintenance Working Group](#)
- [Hyrax-Valkyrie Development Working Group](#)
- [Hyrax Working Group](#)
- [Machine-readable Metadata Modeling Specification \(M3\) Working Group](#)
- [Repository Management Interest Group](#)
- [Samvera BrowseEverything Interest Group](#)
- [Samvera Code Stability Working Group](#)
- [Samvera CONTENTdm Migration Interest Group](#)
- [Samvera Contribution Model Working Group](#)
- [Samvera Documentation Working Group](#)
- [Samvera Fundraising Working Group](#)
- [Samvera Geo Predicates Working Group](#)
- [Samvera Governance Working Group](#)
- [Samvera Hyku Interest Group](#)
- [Samvera Interest Group for Advising the Hyrax Roadmap \(SIGAHR\)](#)
- [Samvera Marketing Working Group](#)
- [Samvera Metadata Interest Group \(formerly Working Group\)](#)
- [Samvera Newspapers Interest Group](#)
- [Samvera Repository Management Interest Group](#)
- [Samvera Roadmap Council](#)
- [Samvera User Experience Interest Group](#)



Communication Channels

- **Slack** - for real-time interaction
- **E-mail** - for asynch and longer discussions
- **Community Calls** - Samvera Tech & Community calls, Virtual Connect
- **In Person** - Connect, regional meetings, other conferences, & workshops

First Up:

Example Sites



What are folks doing with it?



Indiana University Media Collections Online

- Built using the [Avalon Media System](#)
- Rich tool for management and discovery of audio and visual resources
- Provides gated discovery and streaming authentication

Live Site: <https://media.dlib.indiana.edu>

Alexandria Digital Research Library



- Fedora 4 + RDF based
- Broadly focused Institutional Repository hosting multiple content types
- Includes a mix of born digital and digitized content

Live Site: <https://www.alexandria.ucsb.edu>

King's Fund Digital Archive

- Running on Hyku software
- Digitised publications by the King's Fund
- Heavy use of IIIF and Universal Viewer

Live Site: <https://archive.kingsfund.org.uk/>



Emory ETD Repository

- Hyrax Development
- Electronic Theses and Dissertations focus
- Student submission and workflow focused

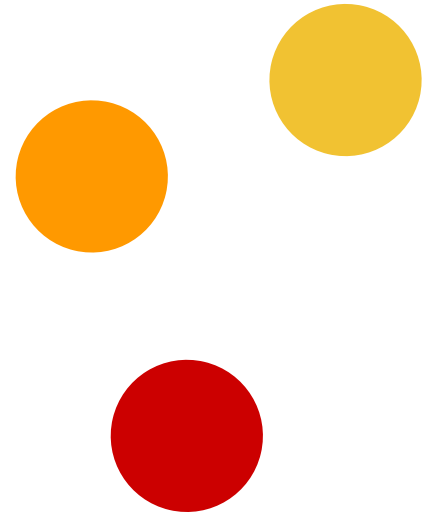
Live Site: <https://etd.library.emory.edu>



More ...

[List of Production repositories on the Samvera wiki](#)

Next Up: **The Technology**



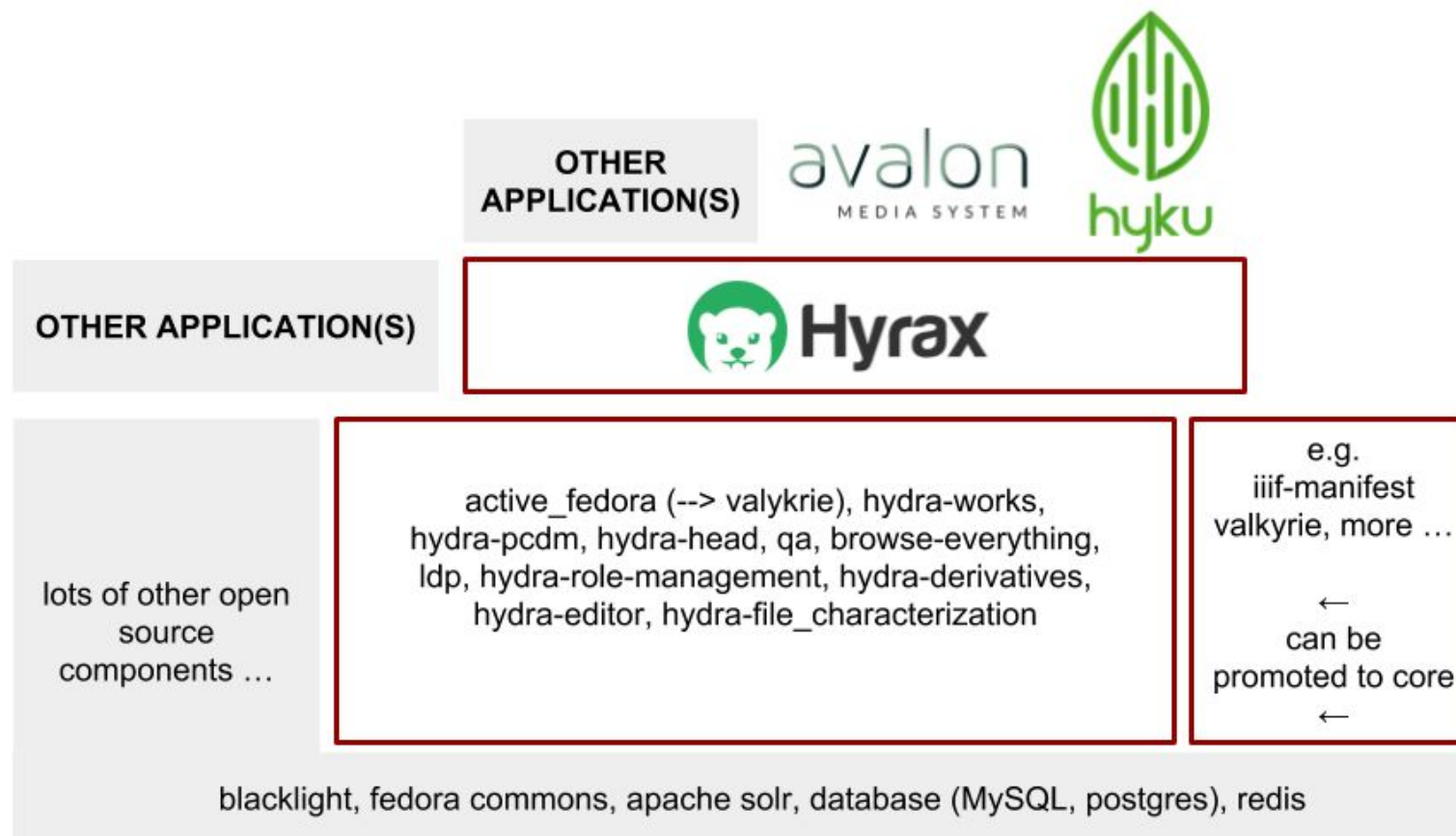
Any questions so far?

Read the White Paper



Samvera Roadmap Council. [White paper: State of Samvera Technology in 2019](#)

The anatomy of Samvera technology





The Stack : foundational elements

Samvera is designed to provide a rich front-end framework for a Fedora repository metadata and data storage layer.

Solr allows for fast searching and rich discovery of content.

Valkyrie allows you to use combinations of PostgreSQL, disk, Fedora, or Solr for metadata, discovery, and storage

If you want to go far, go together!



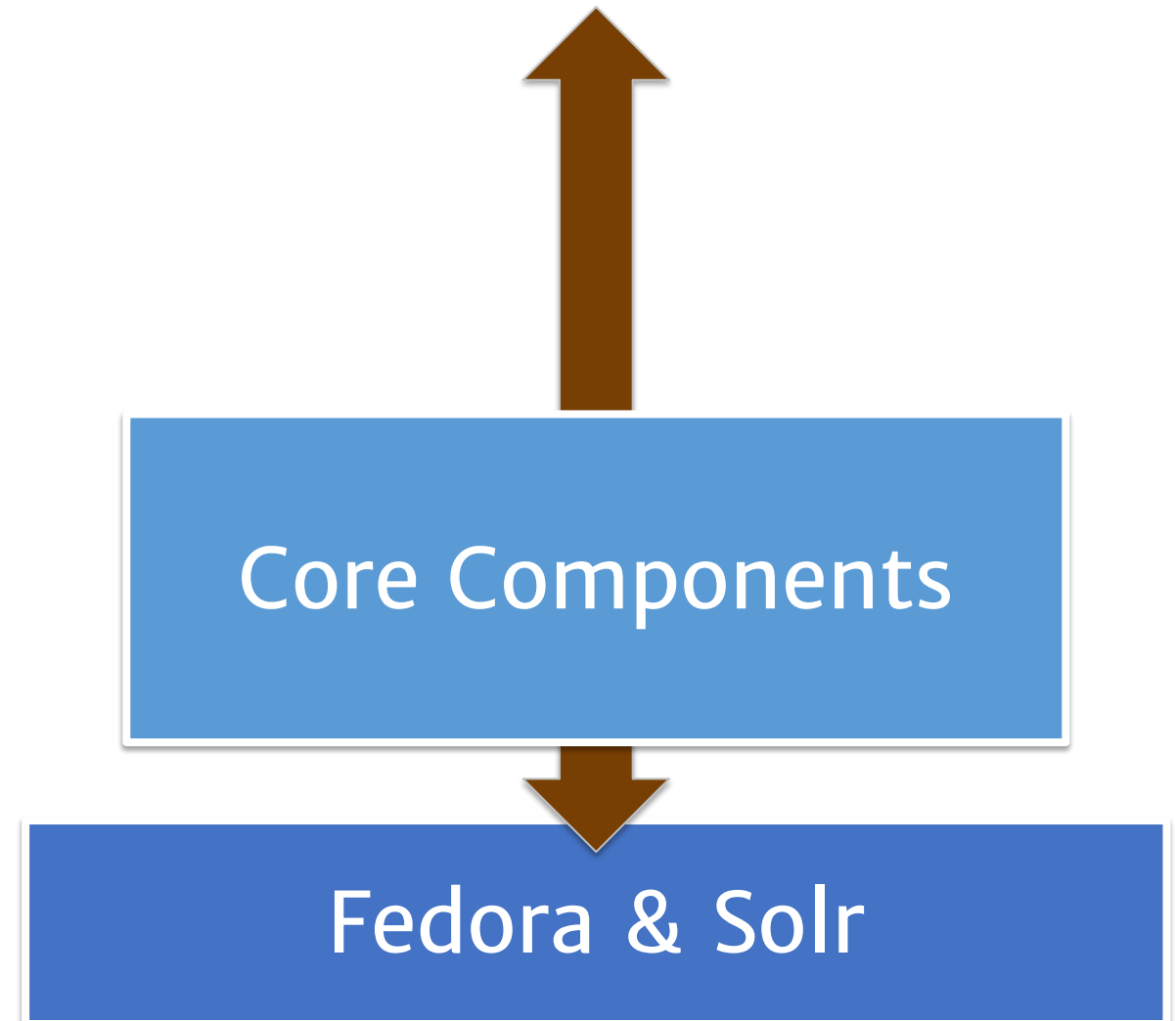
**Fedora & Solr
or Valkyrie**

(PostgreSQL, Fedora, Solr, disk, memory)



The Stack : core components

A set of core components (ruby gems) provide interfaces interacting with Fedora and Solr, PCDM-compliant data models and other commonly-needed features like characterization, text extraction and derivative generation.

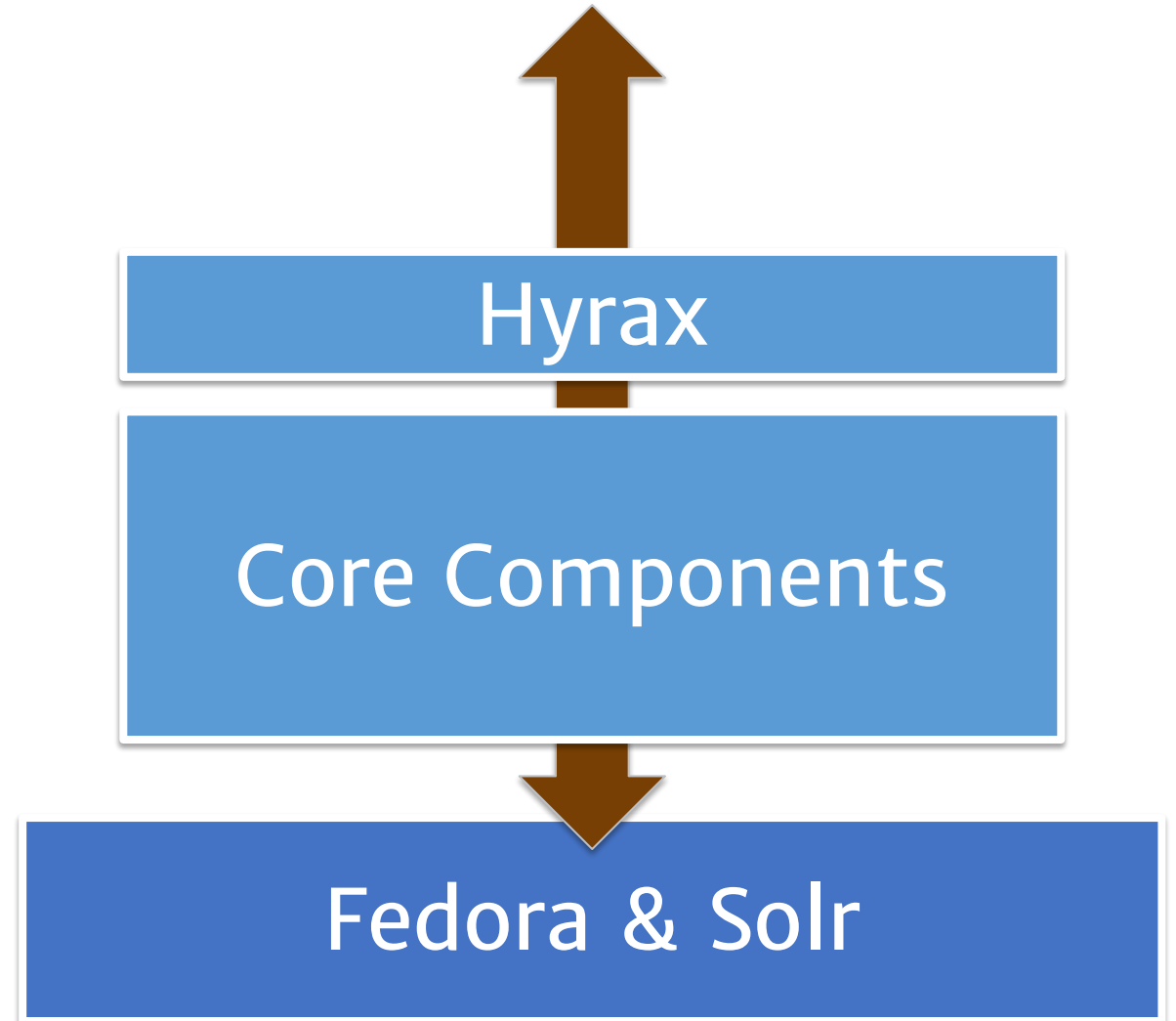


The Stack : Hyrax

The Hyrax rails engine provides a fully featured repository front end with self-deposit and administrative workflow features along with:

- User & Admin dashboards
- Upload via cloud providers
- Citation integration
- File auditing & versioning
- Access controls
- Leases and embargoes

If you want to go far, go together!



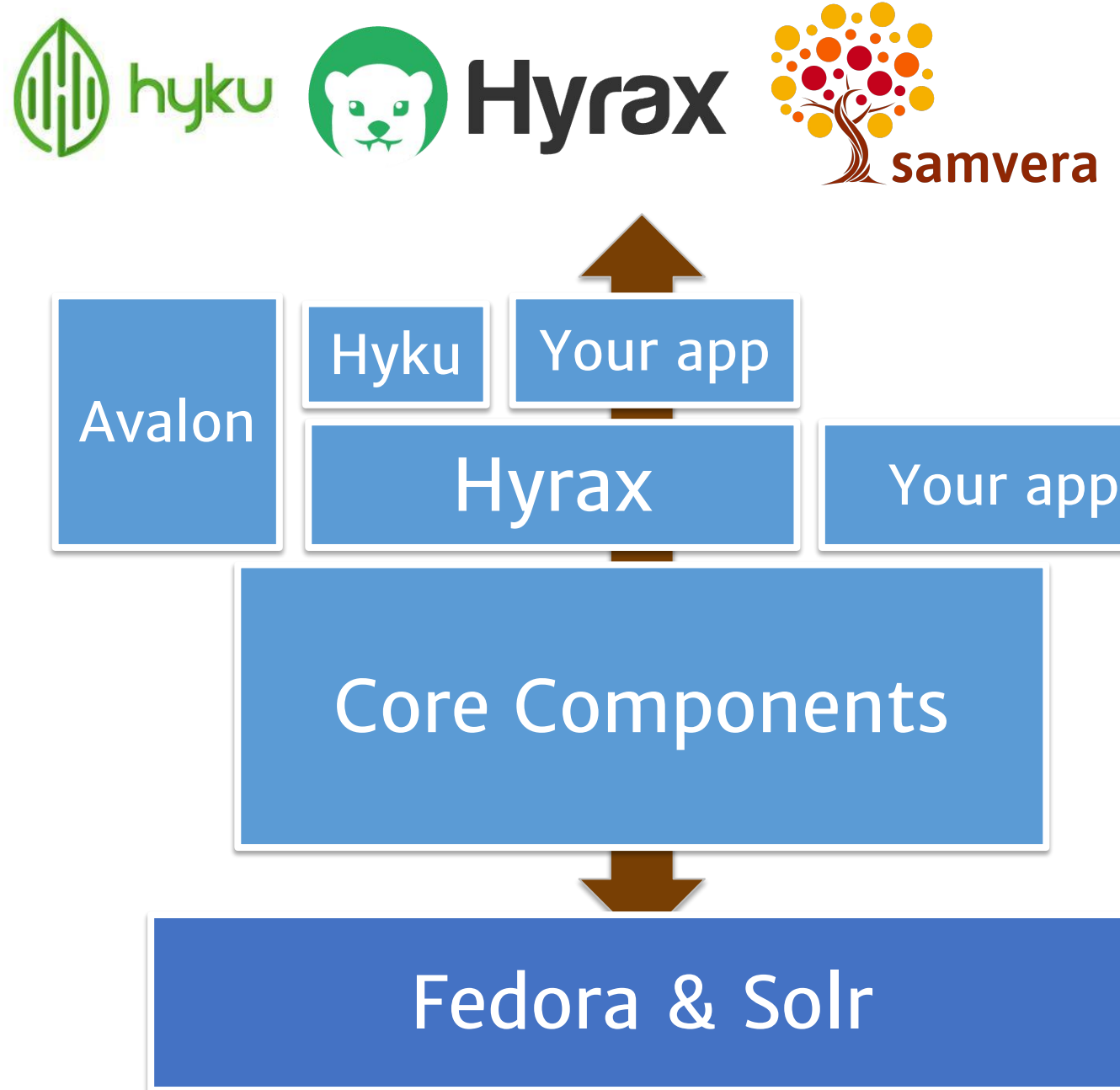
The Stack : you

Your application can be a highly tailored solution built on core components

Or a lightweight wrapper built on Hyrax

Or, an instance of an out of the box solution, like Hyku, or a specialised app like Avalon

If you want to go far, go together!





Code Licensing

- All Samvera code is available under Apache License, Version 2.0
- All code commitments are being managed through Contributor License Agreements
 - Individual – each developer is clear about what they are contributing
 - Corporate – each institution is clear about what it is contributing
- Code contributors maintain ownership of their IP
 - ... and grant a non-exclusive license to the project and its users
 - The conventions under which code is licensed are clear - and folks often license their own work under the same terms



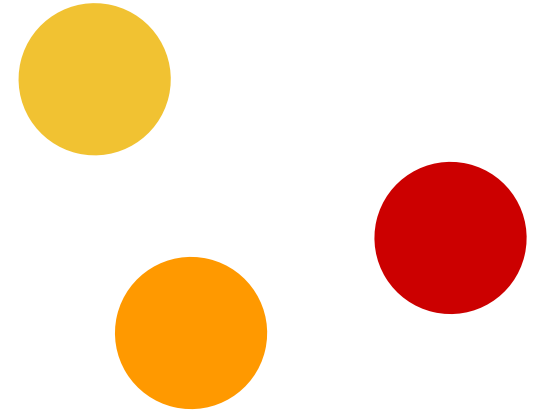
Take home messages

Samvera is:

- **Modular** - pick and choose from a set of components with different ways of creating your repository, from simple to complex, from hosted to in-house design and build
- **Opinionated** - follows patterns and rails practices to offer a way of doing things that the community have coalesced around
- **Flexible** - can meet a range of needs
- **Evolving** -
 - Sufia / CurationConcerns => Hyrax (1 > 2 > 3)
 - Fedora 3 > 4 > ?
 - Rails 2 > 3 > 4 > 5

Next Up:

Hands-On



Any questions so far?



Create an account

1. Visit <https://tenejo.curationexperts.com>
2. Click the Login link
3. Click on “[Sign Up](#)”
(just under the Login button)
4. Enter your e-mail, choose a password, and click on “Sign Up”



Deposit a new work

1. Click on the logo in the upper left corner
2. Click on the [“Share Your Work”](#) button
3. Select a type of work
4. Add required metadata, attach a file, choose visibility, accept the deposit agreement
5. Save your work



Edit your work

1. Choose “Dashboard” from the menu in the upper right corner
2. Click on [Works](#)
3. Use the “Actions” dropdown to choose edit
4. Enter some data in “Additional Fields”
5. Add a file or two, update versions

Browse content

1. Click on the logo in the upper left
2. Click on the [search icon](#) to browse the repository
3. Use search and facet to narrow results
4. View some items
5. Is your item there?
6. Log-out - how does your experience differ?



Deposit workflow

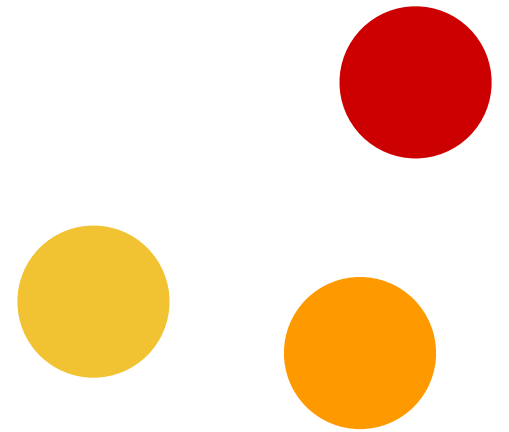
1. Approve some works (Admins)
 - a. All Works
 - b. Review Submissions
 - c. Notifications

Other features to try

1. Everyone
 - Gated discovery: Public, Institution, Private
 - Collections
2. Admins
 - Featured works
 - Workflow / Review
 - Admin dashboard

Next Up:

The Samvera Pitch



The Elevator Pitch? Who's Riding?



- UL/Dean or CIO? Resources and Risk - doing more with less while control the runway, maturity
- Content Specialists? Flexibility and Risk- reducing barriers to effective asset management & preservation
- Management - The Churn - Architecture, flexibility, evolution in a vibrant community, staffing impact
- Developers, PMs, DevOPs, -Connection, Time, Training, Visibility - It's a Family Affair and you are not alone

Community Sustainability...



- Core Purpose- We believe it is possible to provide and evolve solutions which reduce cost and risk in stewardship of digital assets for access and preservation.
- Partners - The whole is greater than the sum of its parts - partners join equally to share the load for mutual gain and greater good.
- Flexible Change with Steady Growth

A World Wide Presence



If you want to go far, go together!



Samvera Partners

- Stanford University
- University of Hull
- University of Virginia
- Duraspace
- University of Notre Dame
- Northwestern University
- Columbia University
- Penn State University
- Indiana University
- London School of Economics and Political Science
- Data Curation Experts
- WGBH
- Boston Public Library
- Duke University
- Yale University
- Virginia Tech
- University of Cincinnati
- Princeton University Library
- Cornell University
- Oregon State University
- University of Oregon
- Tufts University
- University of Alberta
- Digital Public Library of America (DPLA)
- University of Michigan
- University of California, San Diego
- University of York
- Lafayette College
- Washington University in St. Louis (WUSTL)
- The Digital Repository of Ireland
- University of California, Santa Barbara
- University of Houston Libraries
- Emory University
- CoSector, University of London
- Ubiquity Press
- University of Utah

If you want to go far, go together!



Samvera Connect, 2018
Marriott Library, University of Utah
Salt Lake City, Utah



Resource Sustainability

- New Approach for Cross Training
- Reducing Turnover Impact
- Time - If you want to go fast

~~...go alone.~~

...use Samvera



Solution Sustainability...

- Protecting the partner & funders' investment - together build, leverage & evolve
- Organization & Governance
- Adopt best practices

Samvera Participation Snapshot



1.5M Lines of code

351 Current contributors

49771 commits

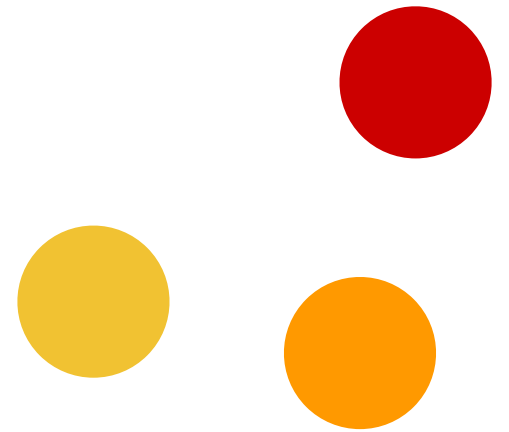
36 Partners

37 Adopters

8 Non Partner Solution Bundle Adopters

Next Up:

What next?



What do I do back home?



Community Resources

- **Website** - Introduction to the community:
<https://samvera.org>
- **Wiki** - Broad range of information types:
<https://samvera.org/wiki>
- **Github** - Code, code wikis, technical details:
 - <https://github.com/samvera>
 - <https://github.com/samvera-labs>
 - <https://github.com/samvera-deprecated>



Try it out

- Code & Docs: <https://github.com/samvera>
- Demo Sites:
<https://tenejo.curationexperts.com/>
- Ask other partners for demos!
<https://wiki.duraspace.org/display/samvera/Partners+and+Implementations>

Questions



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Thank you