

Advancing Hyku End of Project Update

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[advancinghyku.io](https://github.com/samvera-labs/AdvancingHyku)
<https://github.com/samvera-labs/AdvancingHyku>



Open Repositories, 7 June 2022

A Samvera Primer

Samvera is...

a grass-roots, open-source community of library and cultural heritage professionals, including repository managers, developers, metadata experts, content owners and users, working together to create best-in-class digital repository solutions.

Hyrax is...

a locally deployable digital repository structure that requires expertise in system administration as well as Ruby and Rails development to set up, operate and maintain. When customized, the need for an ongoing commitment to maintain and migrate the repository, its contents and its customizations is heightened.

Hyku is...

- Samvera's digital repository application developed with an orientation toward the provision of hosted services;
- based on Hyrax, offering an easy-to-install, easy-to-configure, feature-rich solution supporting next-generation web technologies;
- at release Hyku 4.0 as of May 2022.

Advancing Hyku: Open Source Institutional Repository Platform Development

The project WAS...

- funded by a \$1M grant from Arcadia.
- from October 2019 - March 2022
- supporting the growth of open access through institutional repositories by introducing significant structural improvements and new features to the Samvera Community's Hyku Institutional Repository platform.

The project DID NOT...

- focus on building new institutional repository solutions.
- redirect resources from Hyrax codebase.
- claim that institutional repository population and use is the singular path to the future of open and sustainable scholarly communication.

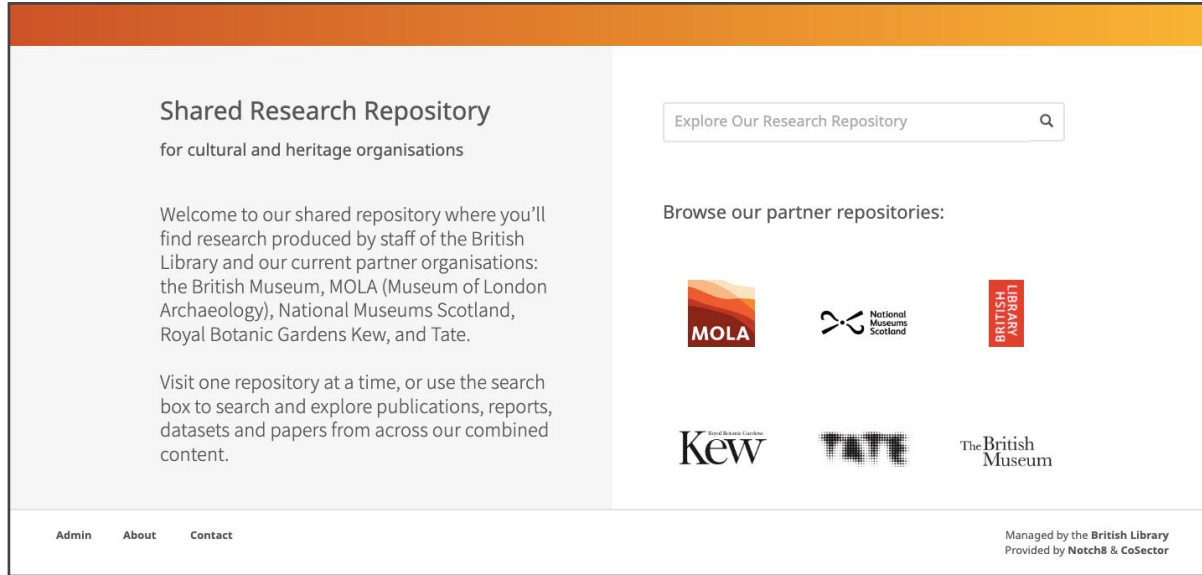
We Advanced Hyku, and You Can, too

Project deliverables introduced significant structural improvements and new features to the Samvera Community's Hyku platform. The following features are all available in community code. Our “[Adoption Path](#)” living document gives technical specifications.

1. Cross tenant search
2. Auto-expiration of embargoes and leases
3. DOI minting in deposit form (DataCite integration)
4. Auto-fill metadata fields with DOI in a single record (both DataCite and Crossref)
5. Auto-population of records with bulk DOIs through Unpaywall
6. Auto-population of records with bulk /list of ORCID IDs
7. Mint DOIs while importing through Bulktrax
8. RIS (Research Information Systems) citation related export
9. Integration with ORCID, author identifier (WP3)
10. In-browser PDF display and annotation through Hypothes.is

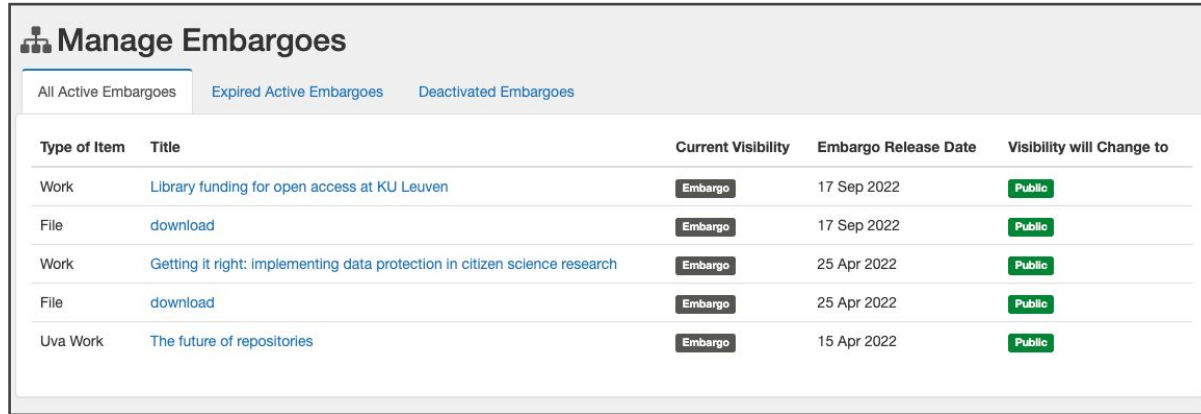


1. Cross Tenant Search



Shared search interface for live British Library customers (in Notch8's UI). As a multi-tenant capable platform, Hyku is ideally suited to use in consortia or by other groups of institutions. Ubiquity Press initially developed a shared search layer for the British Library, and it was released in May 2022 with [Hyku 4](#).

2. Auto-expiration of embargoes and leases



All Active Embargoes Expired Active Embargoes Deactivated Embargoes				
Type of Item	Title	Current Visibility	Embargo Release Date	Visibility will Change to
Work	Library funding for open access at KU Leuven	Embargo	17 Sep 2022	Public
File	download	Embargo	17 Sep 2022	Public
Work	Getting it right: implementing data protection in citizen science research	Embargo	25 Apr 2022	Public
File	download	Embargo	25 Apr 2022	Public
Uva Work	The future of repositories	Embargo	15 Apr 2022	Public

Embargo management page in standard Hyku dashboard (no change by UP to the interface, but embargoes/leases now auto-expire when date is reached). Previously Hyku supported the entry of embargo and lease dates for content, but did not automatically change the status of works at those dates. This feature ensures that embargoed and leased content is reliably made available and removed from public view, respectively, as expected by users.

3. Toggle DOI minting in deposit form (DataCite integration)

DataCite Endpoint

Mode

Prefix

Username

Password

enabled	Hyrax autopopulation	Allow works to be created via autopopulation using DOI & ORCID IDs	on	off
enabled	DOI minting	Toggle the DOI minting for this tenant	on	off
enabled	Hyrax orcid	Allow users to link their profile to ORCID	on	off

Feature switch in a standard Hyku dashboard to enable/disable ability to mint DOIs.

Feature adding DataCite DOIs credentials added to a tenant 'edit' page in a standard Hyku instance admin interface.

4. Auto-fill metadata fields with DOI in a single record

Add New Article

The following fields were auto-populated:
Abstract, Creator, Date Published, DOI, ISSN, Journal Title, License, Official URL, Pagination, Publisher, Title and Volume

If you are adding metadata for a work that already has a DOI, then enter the DOI here and press the button, and we will look up the metadata in DataCite and Crossref and populate the description

10.1371/journal.pone.0265074

Fetch metadata from CrossRef or DataCite with DOI

Descriptions Files Relationships Notes Sharing

Title required
A name to aid in identifying a work

High impact: Examining predictors of faculty-undergraduate coauthored publication and presentation in psycholo

DOI Options

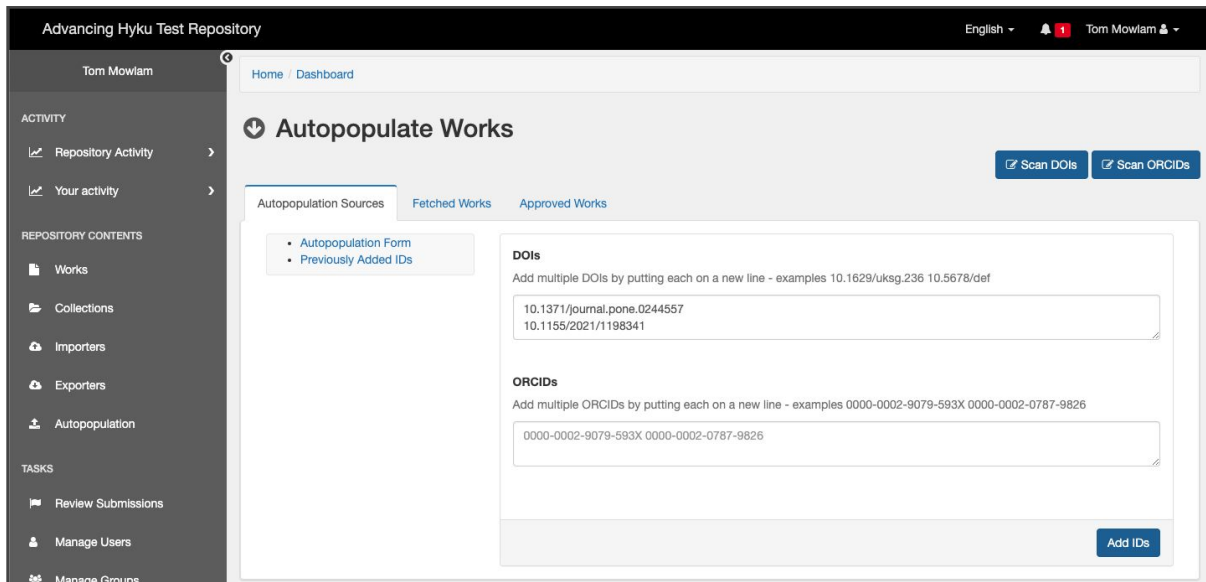
Create draft DOI

DOI status when wo

☒ Do not mint

Portion of single Hyku tenant deposit form with message showing fields have been auto-populated into the form from Crossref (DataCite also supported), after pressing 'fetch metadata' button.

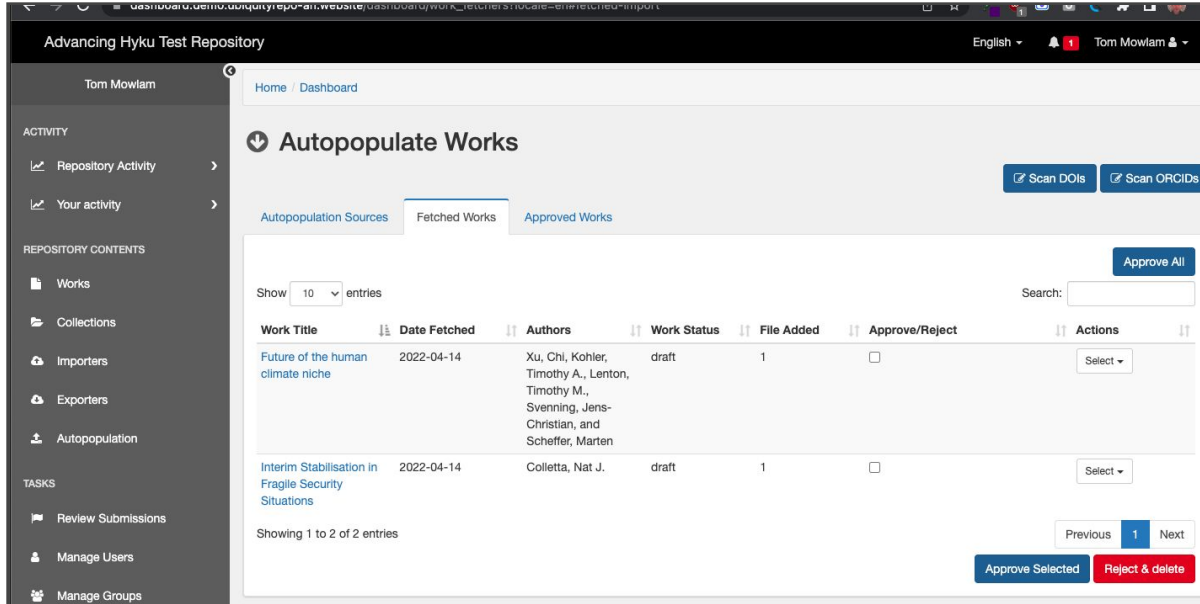
5. Auto-population of records with bulk DOIs through Unpaywall



The screenshot displays the 'Advancing Hyku Test Repository' dashboard. The left sidebar contains navigation links for 'Tom Mowlam', 'ACTIVITY' (Repository Activity, Your activity), 'REPOSITORY CONTENTS' (Works, Collections, Importers, Exporters, Autopopulation), and 'TASKS' (Review Submissions, Manage Users, Manage Groups). The main content area is titled 'Autopopulate Works' and includes tabs for 'Autopopulation Sources', 'Fetched Works', and 'Approved Works'. Under 'Autopopulation Sources', there are links for 'Autopopulation Form' and 'Previously Added IDs'. Two buttons at the top right are 'Scan DOIs' and 'Scan ORCIDs'. The 'Autopopulation Form' section contains two text input fields. The first field is labeled 'DOIs' and has a description: 'Add multiple DOIs by putting each on a new line - examples 10.1629/uksg.236 10.5678/def'. It contains the text '10.1371/journal.pone.0244557' and '10.1155/2021/1198341'. The second field is labeled 'ORCIDs' and has a description: 'Add multiple ORCIDs by putting each on a new line - examples 0000-0002-9079-593X 0000-0002-0787-9826'. It contains the text '0000-0002-9079-593X 0000-0002-0787-9826'. An 'Add IDs' button is located at the bottom right of the form.

Interface to new auto-population tool in the standard Hyku dashboard, with 2 DOIs (one PLoS, one Hindawi) entered into the form.

5. Auto-population of records with bulk DOIs (result)



Advancing Hyku Test Repository

English 1 Tom Mowlam

Home / Dashboard

Autopopulate Works

Scan DOIs Scan ORCIDs

Autopopulation Sources Fetched Works Approved Works

Show 10 entries Search: Approve All

Work Title	Date Fetched	Authors	Work Status	File Added	Approve/Reject	Actions
Future of the human climate niche	2022-04-14	Xu, Chi, Kohler, Timothy A., Lenton, Timothy M., Svenning, Jens-Christian, and Scheffer, Marten	draft	1	<input type="checkbox"/>	Select
Interim Stabilisation in Fragile Security Situations	2022-04-14	Colletta, Nat J.	draft	1	<input type="checkbox"/>	Select

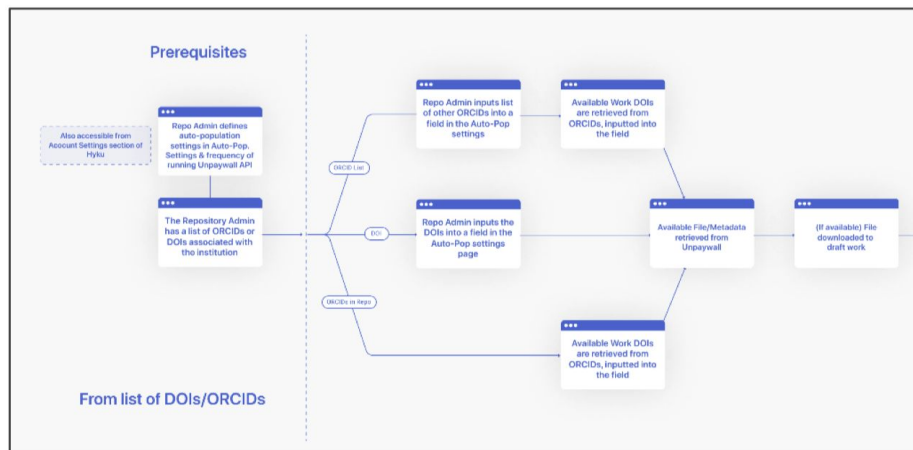
Showing 1 to 2 of 2 entries

Previous 1 Next

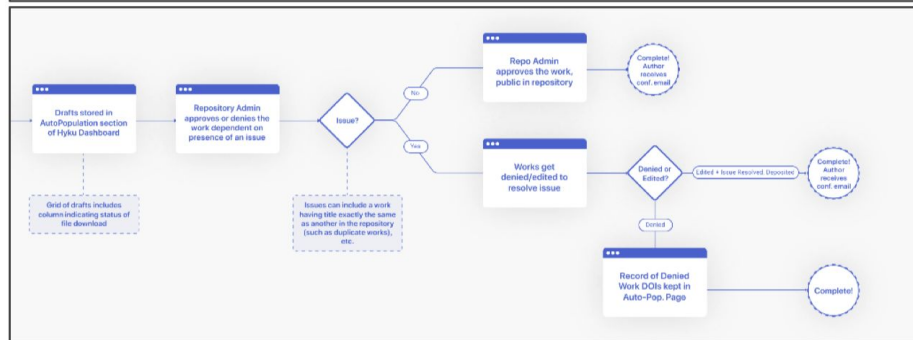
Approve Selected Reject & delete

Result of 'fetch' process in the standard Hyku dashboard, with two works with PDF files ready for review and approval.

Bulk import and auto-population of records: 6. ORCID and 7. DOI



Workflows for auto-populating bulk records upon import with ORCID IDs and DOI assignments..



8. RIS (Research Information Systems) citation export



Portion of standard Hyku UI work landing page showing RIS download link.

```
TY - GEN
T1 - The future of repositories

DO - https://doi.org/10.21992/xn20-3s27
AU - Doe, Jane
AB - This is a test deposit, demonstrating the DOI minting feature
KW - testing
KW - DOIs
DA - 2022-1-1
PY - 2022
PB - Unseen University Press
ER -
```

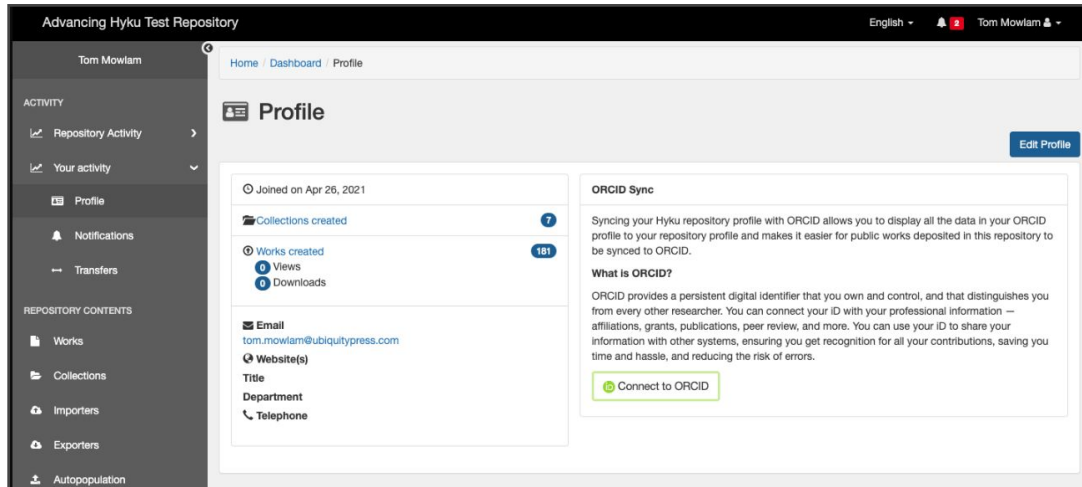
RIS output for a test work.

This feature enables users to download citations for works in Hyku in the common RIS format. This is a standard repository feature that encourages correct citation using a work's DOI, and thus makes it possible to track the citation.

9. Integration with ORCID, author identifier



Feature switch added to the standard Hyku dashboard to enable/disable ORCID synchronisation interface.

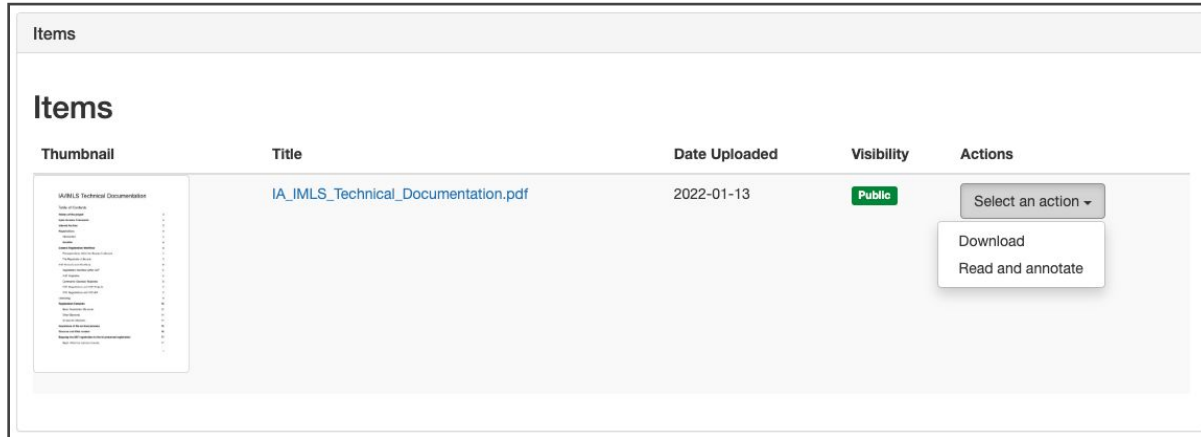


Standard Hyku profile page extended with ORCID connection settings.

10. In-browser PDF display and annotation through Hypothes.is



Feature switch added to the standard Hyku dashboard to enable/disable PDF annotation.

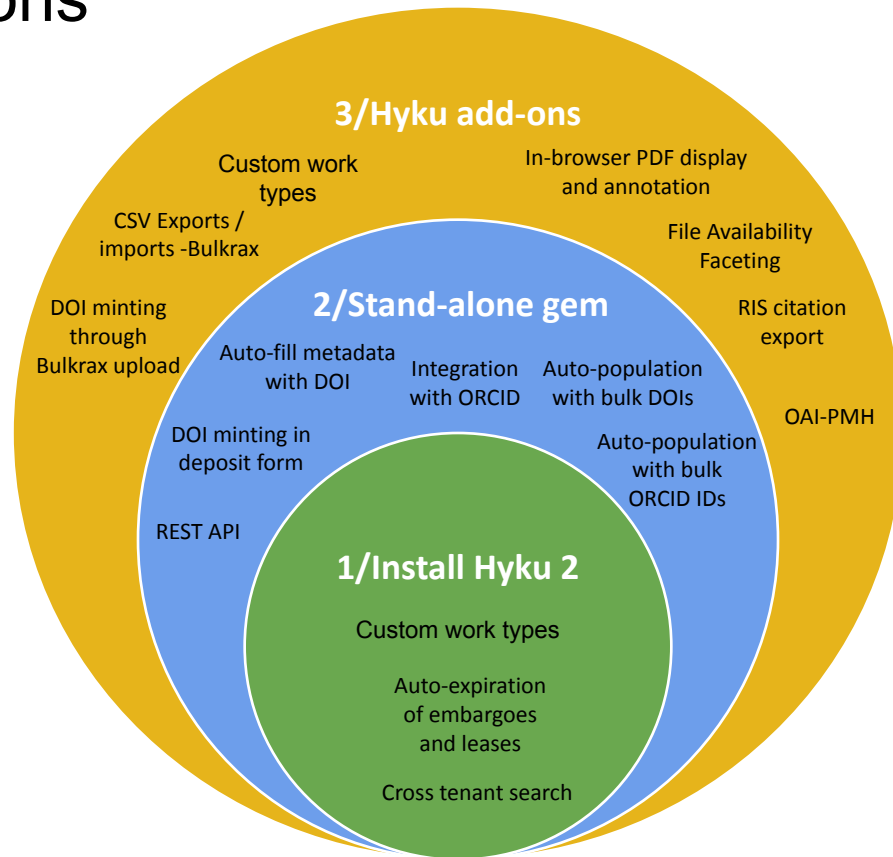


Portion of standard Hyku work page showing new 'Read and annotate' option for PDF files.

Adoption path chart with options

Shared Community Document: Features and Adoption Paths

1. **Option 1**. Install Hyku (version listed) or later (what is the community code)
2. **Option 2**: Available in stand-alone gem (no need to install Hyku addons) (add a gem)
3. **Option 3**. Install [Advancing Hyku-addons](#) to your version of Hyku (add add-ons)
4. Want it all at once? **Option 4** is to work with a service provider on a hosted version of Hyku (inclusive of Options 1 through 3).



Adoption Path

*Adoption Path
for institutions to adopt the latest version (or specific features) of “Advanced Hyku”*

Option 1. Install Hyku (version listed) or later

Option 2: Available in stand-alone gem (no need to install Hyku addons)

Option 3. Install [Advancing Hyku-addons](#) to your version of Hyku

Want it all at once? **Option 4** is to work with UP on a hosted version of Hyku (inclusive of Options 1 through 3).

Feature	Status	Description	How to get it in your repository instance
Cross tenant search (WP0) Demo: WP0 Shared Search Layer (Edward Iye, September 2021)	In Hyku v. 2 Dec 10, 2021	As a service provider/ repository manager, I would like to provide a meta-search in order to search across all tenant repositories within the consortium.	Option 1 Install Hyku y. 2 later Pull request is available on Samvera GitHub
Auto-expiration of embargoes and leases (WP0)	In Hyku v. 3 Apr 13, 2021	As a repository manager, I would like the system to change the visibility of a work when embargoes and leases have expired to avoid looking for and manually	Option 1 Install Hyku v. 3 or later

Community engagement: Hyku Roadmap

GitHub repository view of the Hyku Roadmap project, showing a list of issues categorized by status and priority.

Navigation: samvera / hyku > Projects > Hyku Roadmap

Issues are organized into columns based on their status and priority:

- 7 Done - All Hyku Instances**
 - Cross tenant search** (#1675 opened by ilkayholt) - Project: Advancing Hyku, Repository feature
 - Auto-expiration of embargoes and leases** (#1673 opened by ilkayholt) - Project: Advancing Hyku, Repository feature
 - Integration with ORCID, author identifier** (#1688 opened by ilkayholt) - Project: Advancing Hyku, Repository feature
 - Per-Tenant Google Analytics** (#1685 opened by ilkayholt) - Project: Advancing Hyku, Repository feature
 - DOI minting** (#1683 opened by ilkayholt) - Project: Advancing Hyku, Repository feature
 - Auto-population of metadata from DOI** (#1684 opened by ilkayholt) - Project: Advancing Hyku, Repository feature
 - Admin-Managed Theme Templates for New Use Cases** (#1694 opened by cris15) - Project: Hyku for Consortia, Repository feature
- 12 Done - In Local Instance**
 - Interaction with file contents** (#1690 opened by ilkayholt) - Project: Advancing Hyku, Repository feature
 - OER & ETD Work Types** (#1716 opened by DraxIndustries79) - Project: Hyku for Consortia, Repository feature
 - Read-only REST API** (#1681 opened by ilkayholt) - Project: Advancing Hyku, Repository feature
 - CSV Exports / Imports - Bulkxray** (#1676 opened by ilkayholt) - Project: Advancing Hyku, Repository feature
 - Custom work types and extended metadata attributes** (#1674 opened by ilkayholt) - Project: Advancing Hyku, Repository feature
 - File Availability Faceting** (#1678 opened by ilkayholt) - Project: Advancing Hyku, Repository feature
 - OAI-PMH** (#1680 opened by ilkayholt) - Project: Advancing Hyku, Repository feature
 - RIS (Research Information Systems)**
- 2 In progress**
 - Speed up the test suite** (#1698 opened by DraxIndustries79) - Project: HykuUP
 - Bring Helm charts and deployment strategy to Hyku** (#1699 opened by DraxIndustries79) - Project: Shared Research Repository
- 4 Soon**
 - YAML based metadata schema** (#1784 opened by cris15) - Project: University of Tennessee Knoxville
 - Ability to add an image as a collection thumbnail** (#1783 opened by cris15) - Project: Shared Research Repository
 - Allow Admins to Feature and Order Collections on the home page.** (#1782 opened by cris15) - Project: Shared Research Repository
 - Hyrax 3.x upgrade for Hyku** (1 task, #1781 opened by cris15) - Project: University of Tennessee Knoxville
- 1 Later**
 - Shared Research Repository Work Types** (#1717 opened by DraxIndustries79) - Project: Shared Research Repository, Repository feature
- 5 Deferred**
 - anything not completed within a project or to be considered later by some other project. Added by ilkayholt
 - Increase Access & preservation** (#1691 opened by ilkayholt) - Project: Advancing Hyku, Repository feature
 - Integration with metrics tools e.g. Altmetrics, Google Scholar** (#1689 opened by ilkayholt) - Project: Advancing Hyku, Repository feature
 - Stats Report Mailer** (#1687 opened by ilkayholt) - Project: Advancing Hyku, Repository feature
 - Title availability checker** (#1677 opened by ilkayholt) - Project: Advancing Hyku, Repository feature

<https://github.com/samvera/hyku/projects/1>

Documentation Map

Code:

- <https://github.com/samvera/hyku/> and
- https://github.com/ubiquitypress/hyku_addons/

Developer documentation:

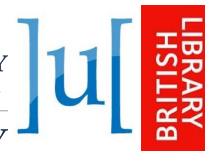
- https://github.com/ubiquitypress/hyku_addons/wiki
- <https://github.com/samvera/hyku/releases/tag/v4.0.0>
- https://bit.ly/AH_AdoptionPathCharth

Marketing/outreach:

- <https://advancinghyku.io/>
- <https://samvera-labs.github.io/AdvancingHyku/> (archive)



Advancing Hyku Project



ARCADIA
A CHARITABLE FUND OF
LISBET RAUSING & PETER BALDWIN

Thank you!
Q&A



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