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Advancing Hyku End of Project Update

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advancinghyku.io

samvera.atlassian.net/wiki/spaces/hyku/



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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.

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 Bulkcrax
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



hyku



hyku



hyku

Features up for adoption

Opportunities for future improvements and new features to the Samvera Community's Hyku platform, if of use to others in the community

1. Stats reporting email: as a depositor, I get regular emails showing use of my work by repository visitors
2. Metrics per article/work integrate with known metrics tools like Altmetric and Google Scholar
3. Preservation packages
(Hyku for Consortia-APTTrust adopting)



hyku

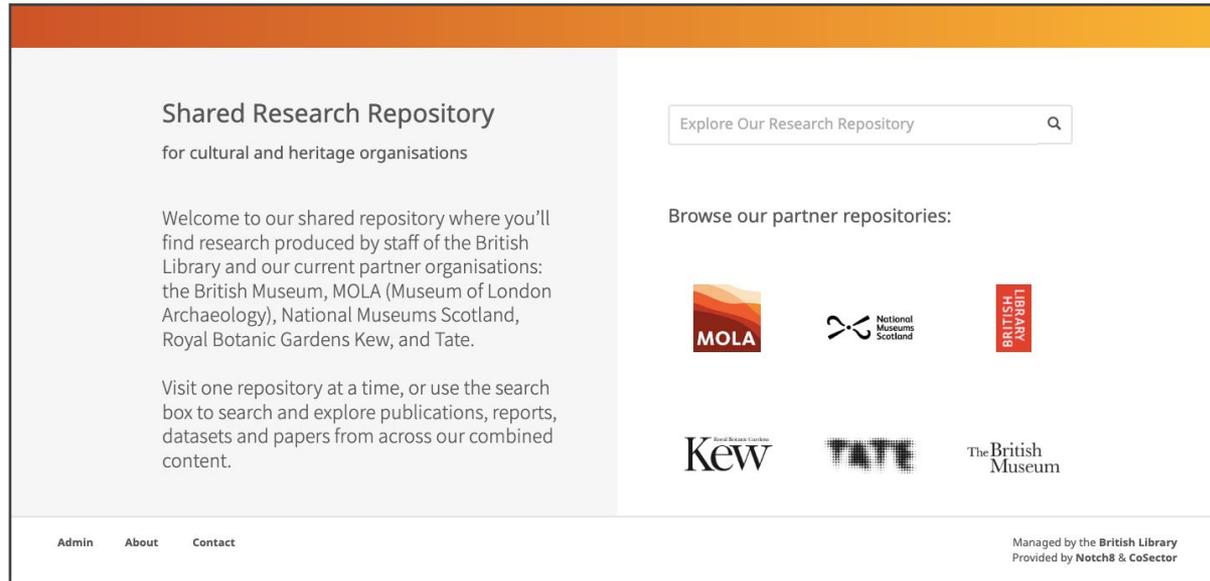


hyku



hyku

1. Cross Tenant Search

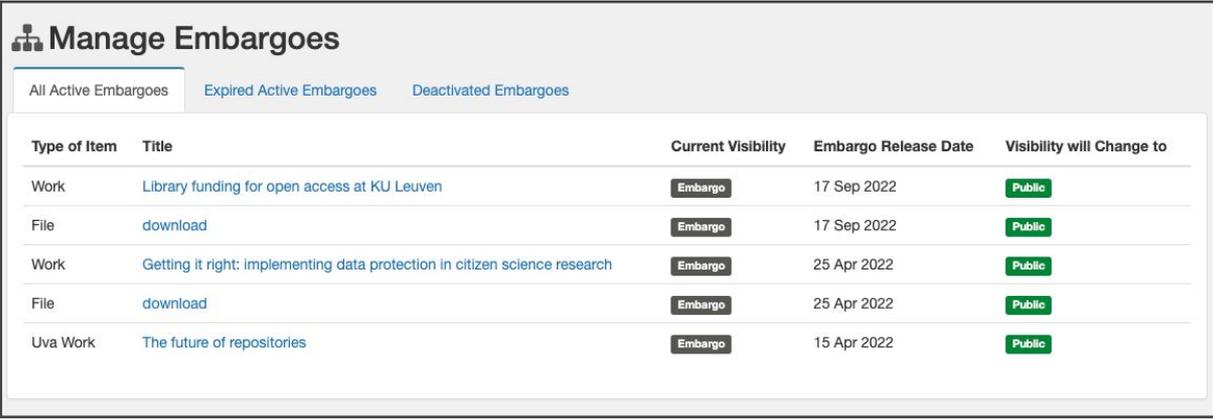


The screenshot shows a web interface for a 'Shared Research Repository'. The header is orange. The main content area is white and divided into two columns. The left column contains the title 'Shared Research Repository' and a subtitle 'for cultural and heritage organisations'. Below this is a welcome message: 'Welcome to our shared repository where you'll find research produced by staff of the British Library and our current partner organisations: the British Museum, MOLA (Museum of London Archaeology), National Museums Scotland, Royal Botanic Gardens Kew, and Tate.' A second paragraph says: 'Visit one repository at a time, or use the search box to search and explore publications, reports, datasets and papers from across our combined content.' The right column features a search bar with the placeholder text 'Explore Our Research Repository' and a magnifying glass icon. Below the search bar is the heading 'Browse our partner repositories:' followed by six logos arranged in two rows: MOLA, National Museums Scotland, BRITISH LIBRARY, Kew, TATE, and The British Museum. At the bottom left, there are links for 'Admin', 'About', and 'Contact'. At the bottom right, it says 'Managed by the British Library' and 'Provided by Notch8 & CoSector'.

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 this has now been ported into Hyku 3.



2. Auto-expiration of embargoes and leases



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

Fetch metadata from CrossRef or DataCite with DOI

Descriptions | Files | Relationships | Notes | Sharing

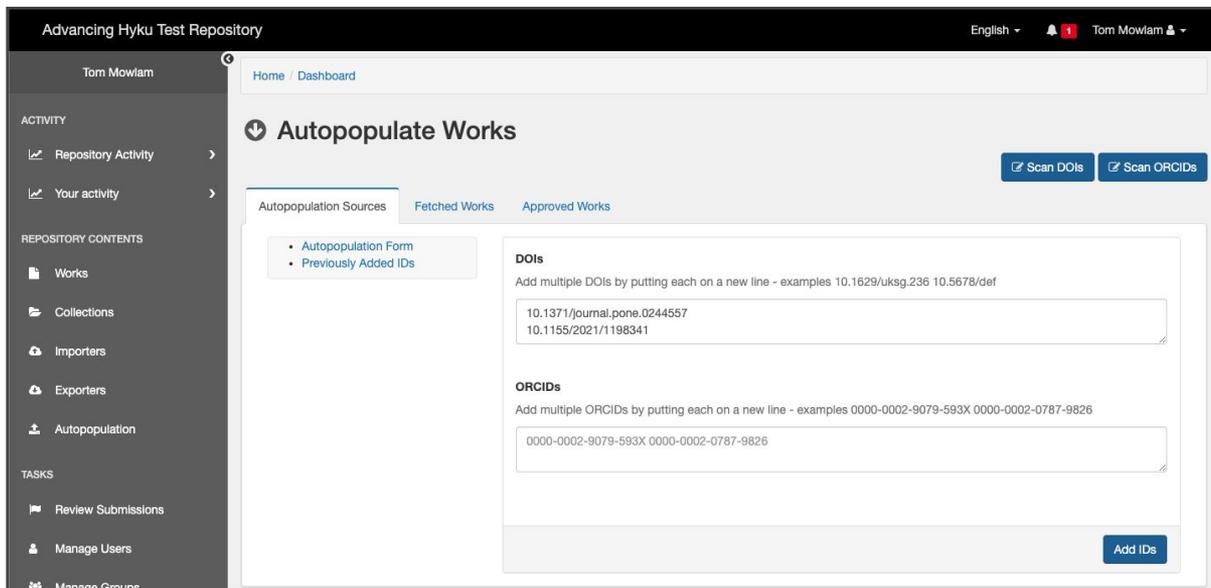
Title required
A name to aid in identifying a work

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



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

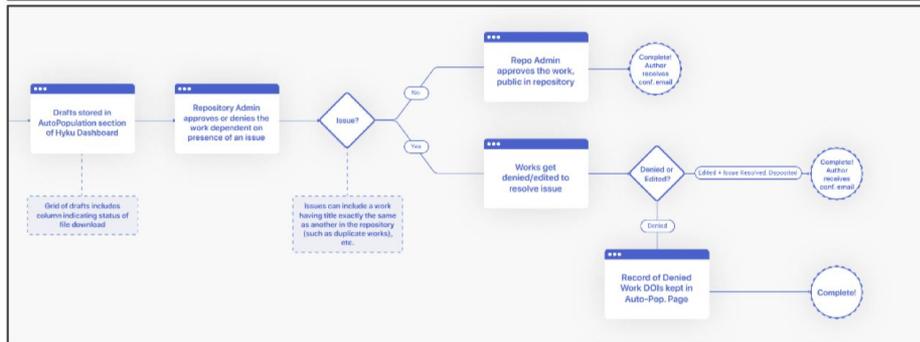
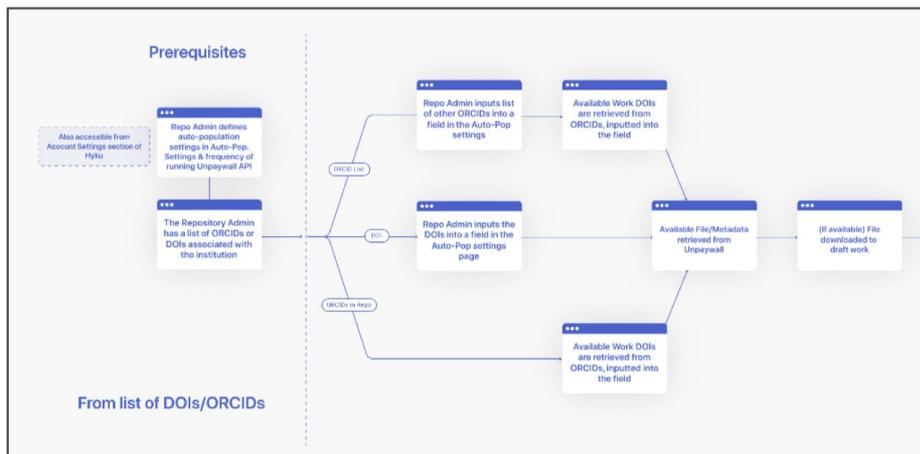
Previous 1 Next

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.

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.

```
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 -
```

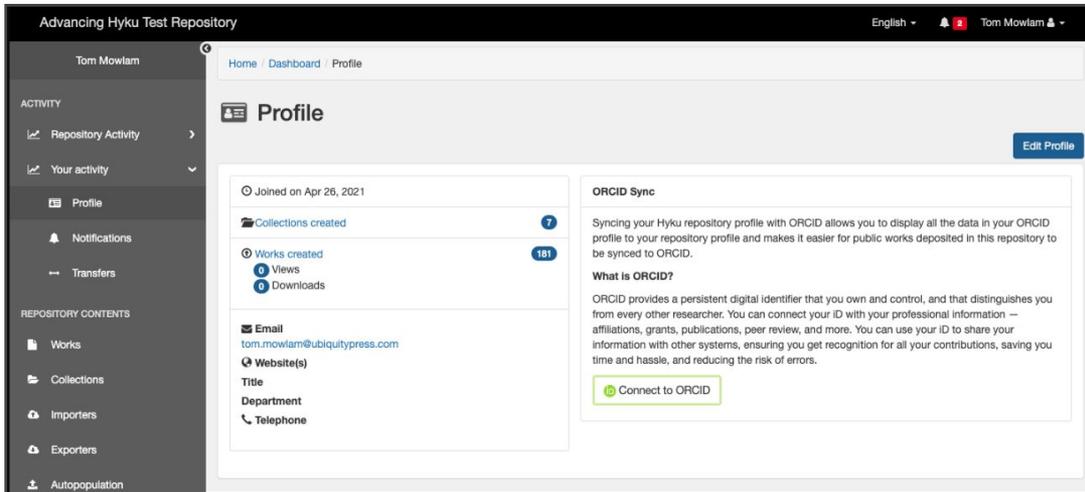
RIS output for a test work.



9. Integration with ORCID, author identifier



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



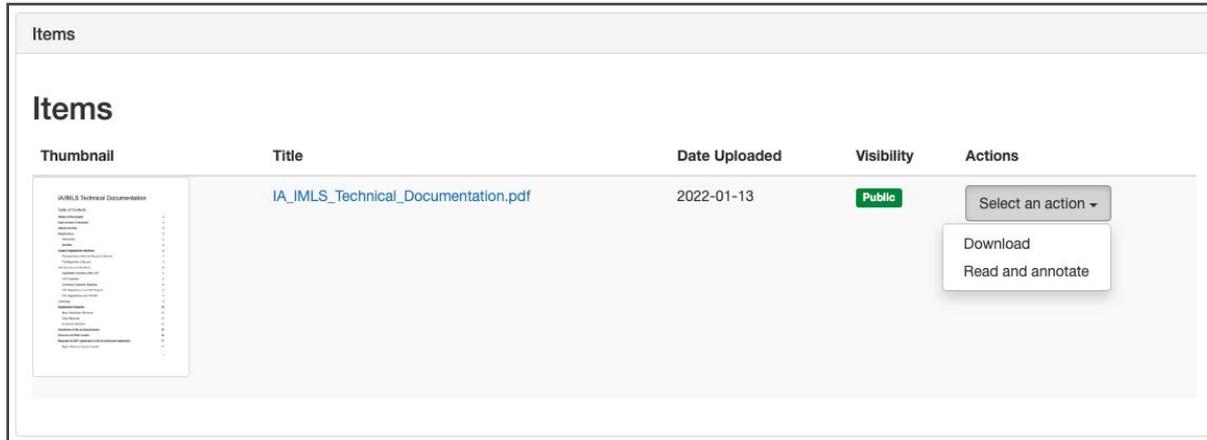
Standard Hyku profile page extended with ORCID connection settings.



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



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



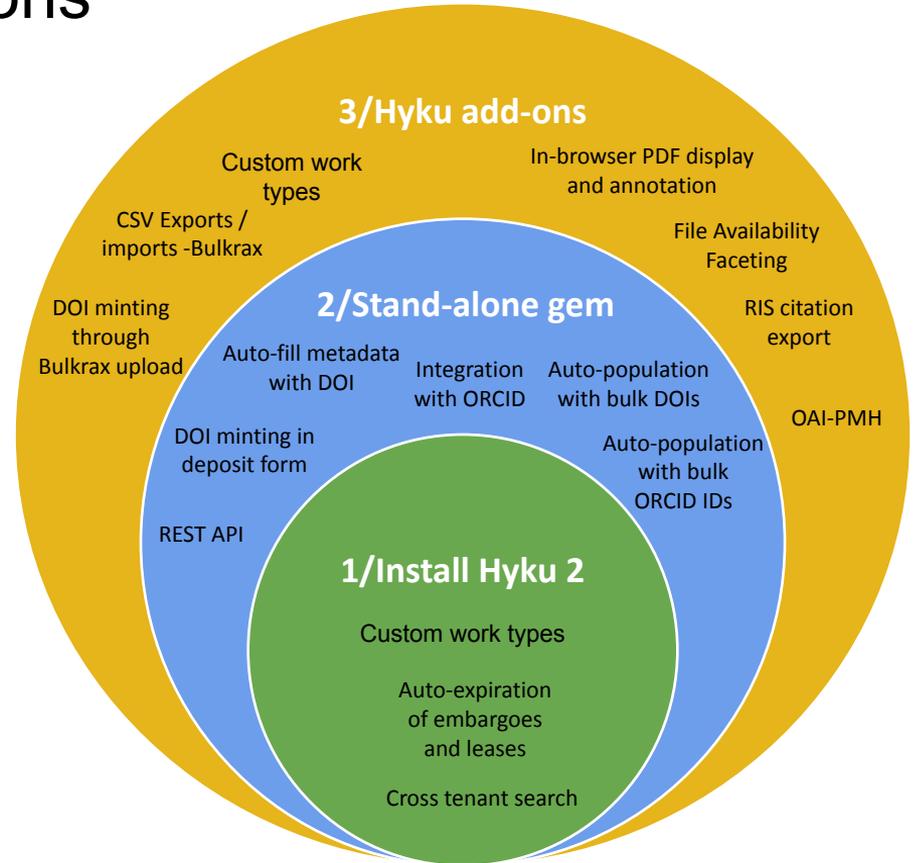
Portion of standard Hyku work page showing new 'Read and annotate' option for PDF files.



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).



Community engagement: Hyku Roadmap

The screenshot displays the GitHub project page for the Hyku Roadmap, organized into a Kanban board with the following columns and items:

- 7 Done - All Hyku Instances**
 - Cross tenant search** (#1675) by ilkayholt. Project: Advancing Hyku. Repository feature.
 - Auto-expiration of embargoes and leases** (#1673) by ilkayholt. Project: Advancing Hyku. Repository feature.
 - Integration with ORCID, author identifier** (#1688) by ilkayholt. Project: Advancing Hyku. Repository feature.
 - Per-Tenant Google Analytics** (#1685) by ilkayholt. Project: Advancing Hyku. Repository feature.
 - DOI minting** (#1683) by ilkayholt. Project: Advancing Hyku. Repository feature.
 - Auto-population of metadata from DOI** (#1684) by ilkayholt. Project: Advancing Hyku. Repository feature.
 - Admin-Managed Theme Templates for New Use Cases** (#1694) by crisr15. Project: Hyku for Consortia. Repository feature.
- 12 Done - In Local Instance**
 - Interaction with file contents** (#1675) by ilkayholt. Project: Advancing Hyku. Repository feature.
 - OER & ETD Work Types** (#1716) by DraxIndustries79. Project: Hyku for Consortia. Repository feature.
 - Read-only REST API** (#1681) by ilkayholt. Project: Advancing Hyku. Repository feature.
 - CSV Exports / imports - Bulkcrax** (#1676) by ilkayholt. Project: Advancing Hyku. Repository feature.
 - Custom work types and extended metadata attributes** (#1674) by ilkayholt. Project: Advancing Hyku. Repository feature.
 - File Availability Faceting** (#1678) by ilkayholt. Project: Advancing Hyku. Repository feature.
 - OAI-PMH** (#1680) by ilkayholt. Project: Advancing Hyku. Repository feature.
 - RIS (Research Information Systems)**
- 2 In progress**
 - Speed up the test suite** (#1698) by DraxIndustries79. Project: HykuUP.
 - Bring Helm charts and deployment strategy to Hyku** (#1699) by DraxIndustries79. Project: Shared Research Repository.
- 4 Soon**
 - YAML based metadata schema** (#1784) by crisr15. Project: University of Tennessee Knoxville.
 - Ability to add an image as a collection thumbnail** (#1783) by crisr15. Project: Shared Research Repository.
 - Allow Admins to Feature and Order Collections on the home page.** (#1782) by crisr15. Project: Shared Research Repository.
 - Hyrax 3.x upgrade for Hyku** (1 task) (#1781) by crisr15. Project: University of Tennessee Knoxville.
- 1 Later**
 - Shared Research Repository Work Types** (#1717) 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) by ilkayholt. Project: Advancing Hyku. Repository feature.
 - Integration with metrics tools e.g. Altmetrics, Google Scholar** (#1689) by ilkayholt. Project: Advancing Hyku. Repository feature.
 - Stats Report Mailer** (#1687) by ilkayholt. Project: Advancing Hyku. Repository feature.
 - Title availability checker** (#1677) by ilkayholt. Project: Advancing Hyku. Repository feature.

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3. Preservation packages
(Hyku for Consortia-APTTrust adopting)



hyku



hyku



hyku

Documentation Map

Code:

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

Developer documentation:

- https://github.com/ubiquitypress/hyku_addons/wiki

Marketing/outreach:

- <https://advancinghyku.io/> now, and
- Samvera wiki TBD

Thank you!

Q&A

advancinghyku.io

samvera.atlassian.net/wiki/spaces/hyku/



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