DSpace 8.0 and Beyond

What's new and how a global community makes DSpace happen



Andrea Bollini, CTO/Deputy COO @ 4Science - andrea.bollini@4science.com

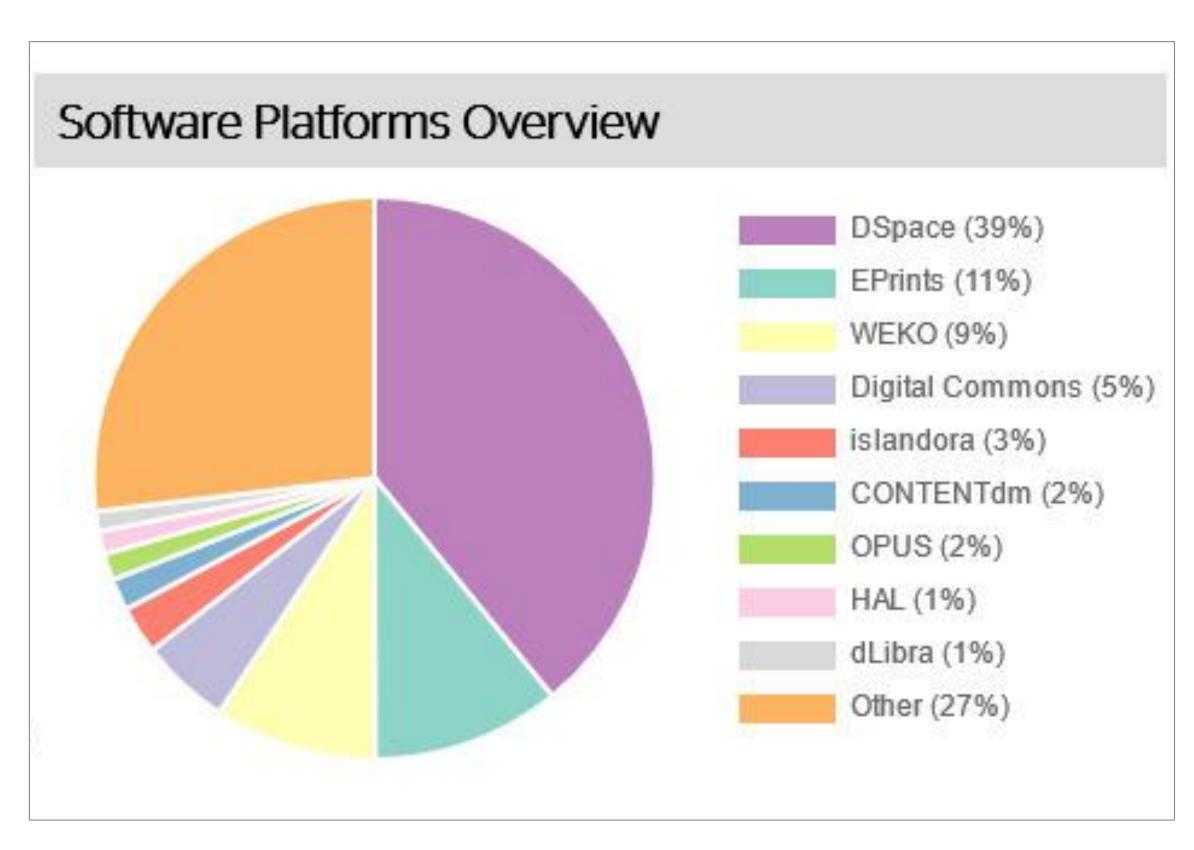
Ignace Deroost, Director of Sales and Marketing @ Atmire - ignace@atmire.com

Michele Mennielli, Sr Global Strategis @ Lyrasis - michele.mennielli@lyrasis.org

Kristi L. Park, Executive Director @ TDL - kristi.park@austin.utexas.edu



About DSpace



OpenDOAR Statistics https://v2.sherpa.ac.uk/view/repository_visualisations/1.html

The most widely adopted repository

Not just a software, but a global community

It evolves with its users

DSpace Org Home is Lyrasis



Mission-driven | Community-led | Nonprofit









- +2000 members
- +5000 users
- +130 countries

At Lyrasis, We support

Our communities in different ways



Community-Led Programs

ArchivesSpace | CollectionSpace |
DSpace | Fedora | VIVO



Content and Scholarly Communications

Group license agreements for libraries | support for OA content programs



Research and Innovation

Lyrasis Learning | Catalyst Fund |
Analysis and Reports



ORCID and DataCite and IRUS

Lyrasis is the Consortia Leader for the US Region



Hosting

ArchivesSpace | CollectionSpace |
Dspace | DuraCloud | Islandora | Palace



The Palace Project

Open-source eBook services for Libraries

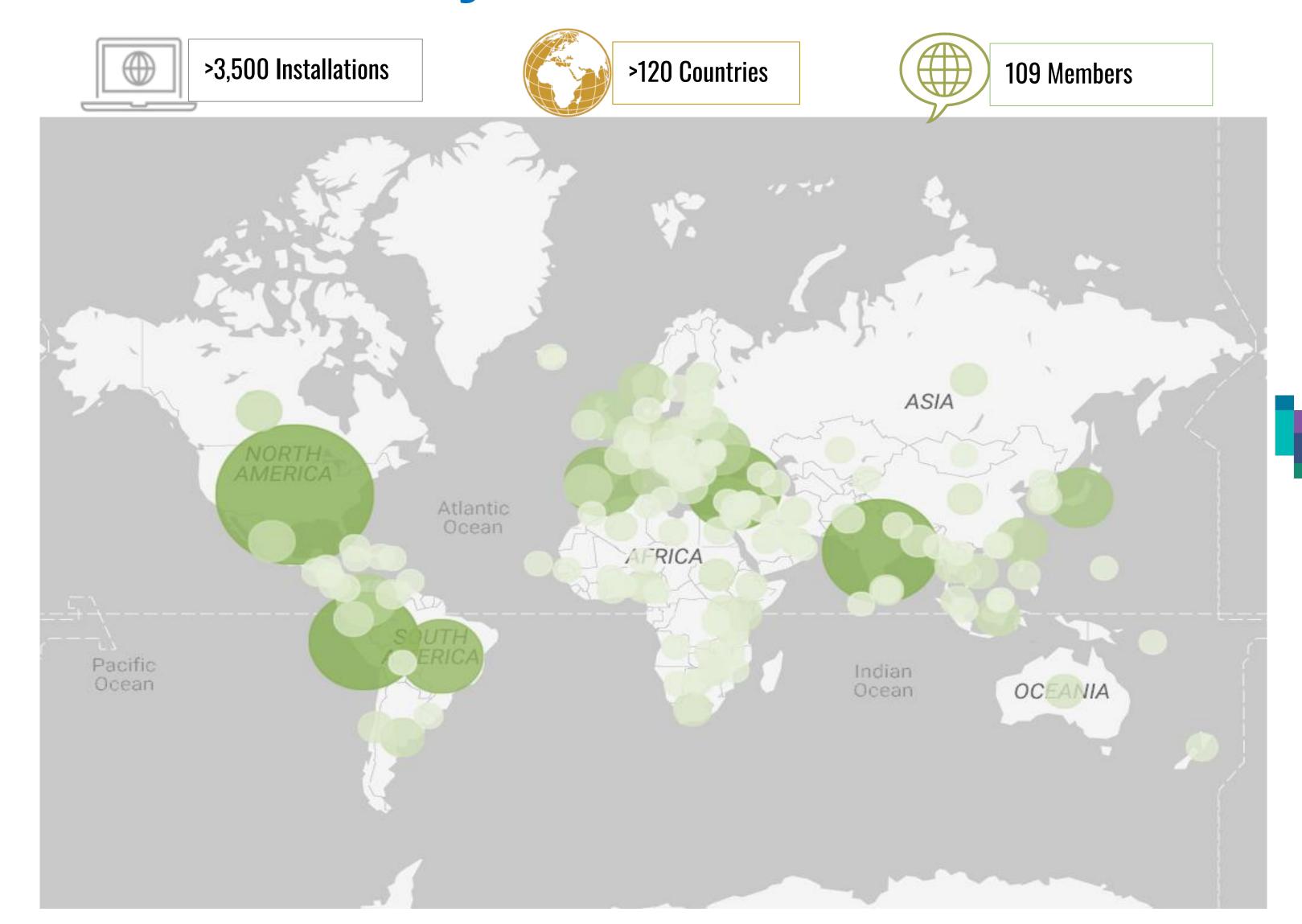


LA Referencia

Red de repositorios de acceso abierto a la ciencia

The DSpace Community

Confederation of Open Access Repositories







DSpace Service Providers



Platinum Providers

contribute a value of over \$50,000 annually to the program, either financially or in-kind









Gold Providers

contribute a value of \$25,000 annually to the program, either financially or in-kind











Silver Providers

contribute a value of \$10,000 annually to the program, either financially or in-kind













DSpace Service Providers Contributions

RSP Contributions in 2023

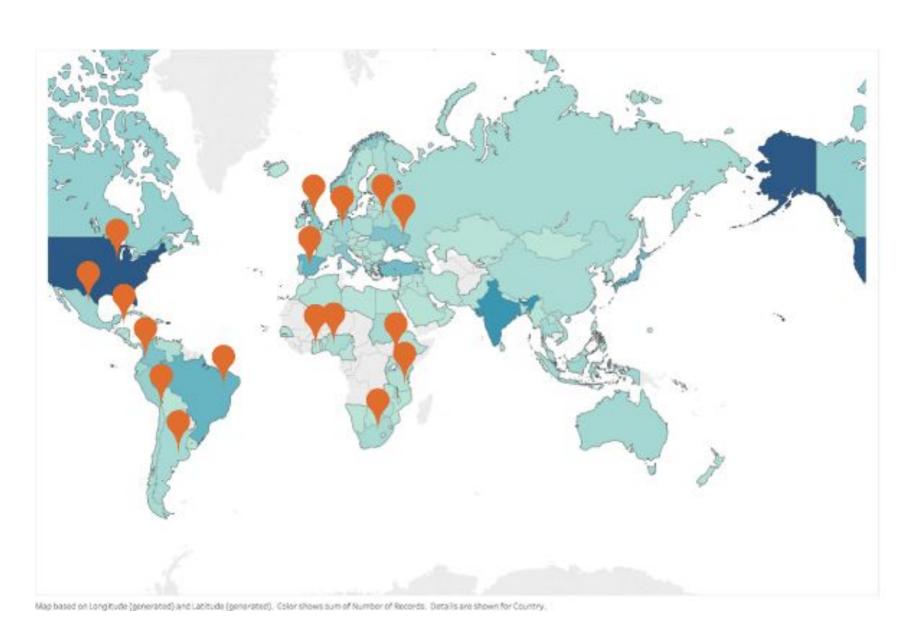
#	Service Provider	Total Value	Non-Tech Contribution	Tech Contribution	Total # of Hours of Contribution
1	4Science	\$96,312.50	291	1023.5	1314.5
2	The Library Code	\$64,342.50	800	257.9	1057.9
3	Atmire	\$56,412.50	156	581.5	737.5
4	eScire	\$25,000.00	288	108	396
5	PCG Academia	\$25,000.00	274	60	334
6	Dsquare Technologies	\$25,000.00	202.5	80	282.5
7	DSpaceDirect	\$25,000.00	184	24	208
8	D&L	\$10,000.00	104	26	130
9	Arvo Consultores	\$10,000.00	14	110	124
10	Vir Softech	\$10,000.00	20	48	68
11	NEKI IT	\$10,000.00	48	0	48

For more details visit the RSP Wiki page:

https://wiki.lyrasis.org/display/DSPACE/Service+Providers



Engagement and Participation



23 National User Groups

- Slack channel: #dspace-XX
- UG WIKI pages
- Mailing list
- National webinars / events



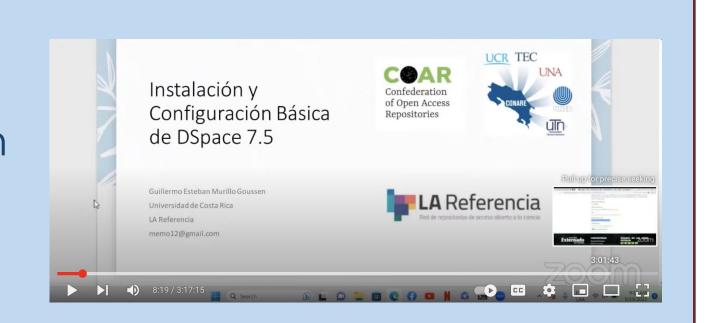
2023

- (July) DSpace 7.6 release public Q&A webinar Webinar slides/ recordings available at 2023-07-19 DSpace 7.6 Q&A Webinar
- (May) Entities are Important for Institutional Repositories and what you can do with DSpace- Webinar presented by DSpace Service Provider 4Science May 30, 2023
- (March) DSpace 7.5 release public Q&A webinar Webinar slides/ recordings available at 2023-03-29 DSpace 7.5 Q&A Webinar

2022

- **(November) DSpace 7.4 Webinar Series -** Webinar series slides / recordings available at 2022-11 DSpace 7.4 Webinar Series
- (July) DSpace 7 Q&A Webinar Webinar slides / recording available at 2022-07-13 DSpace 7 Q&A webinar

Dspace 7 workshop (in Spanish) in collaboration with La Referencia and **CONARE**





Addressing DSpace Community challenges





Priorities for DSpace 8

DSpace 8.0 had a shortened development cycle and DSpace Steering established four priorities

Include major features which just missed the 7.x series of releases

FEATURES INCLUDE



- > COAR Notify
- > OpenAIRE Correction service
- Port "REST-based Quality Control Reports"
- Basic Duplicate Detection in Submission form

2

New features which empower users (focus on the Admin User Interface)

FEATURES INCLUDE



- Request withdrawal or reinstatement of Items
- "Processes" page reorganization
- Edit Item supports authority control lookup & lookup via external sources
- Item Submission forms can be configured for entire Community

3

Any other features which existed in 6.x but missed the 7.x series of releases

FEATURES INCLUDE



- Advanced Search
- Search facets on Homepage / Community / Collection
- Search within Community / Collection

4

Necessary bug fixes, accessibility fixes, performance improvements & dependency upgrades

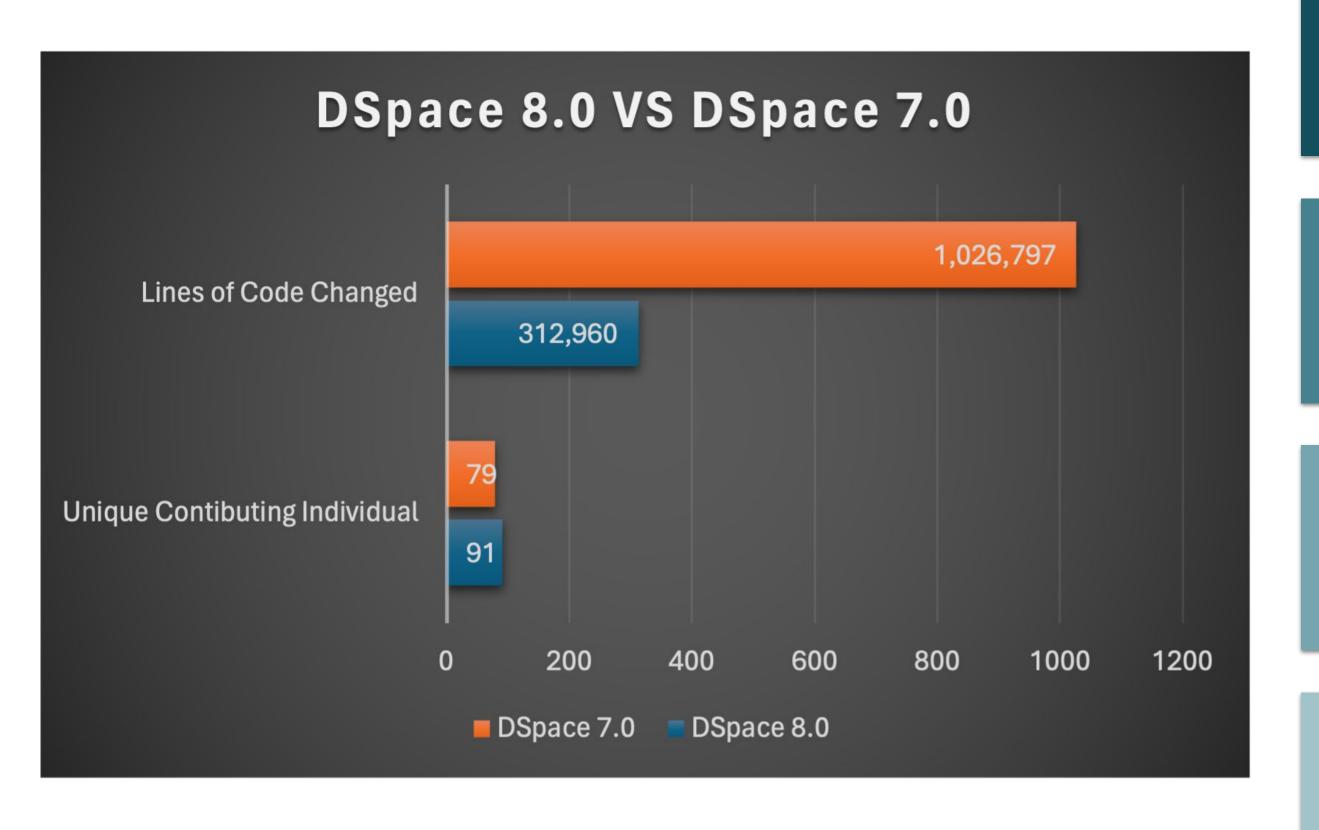
FEATURES INCLUDE



- Large number of accessibility fixes (header, navbar, search, admin tools, MyDSpace, etc.)
- Accessibility fixes backported to 7.6.2 (due in July/Aug)
- > Major dependency upgrades:
 - Backend upgraded to Spring v6
 - Frontend upgraded to Angular 17



8.0 Statistics



>6,000 lines of code refactored for the dependency upgrades

Testathon revealed a number of bugs which were the result of these upgrades.

Community developers are still resolving them.

DSpace 8.0 release: Approx. June 17-24

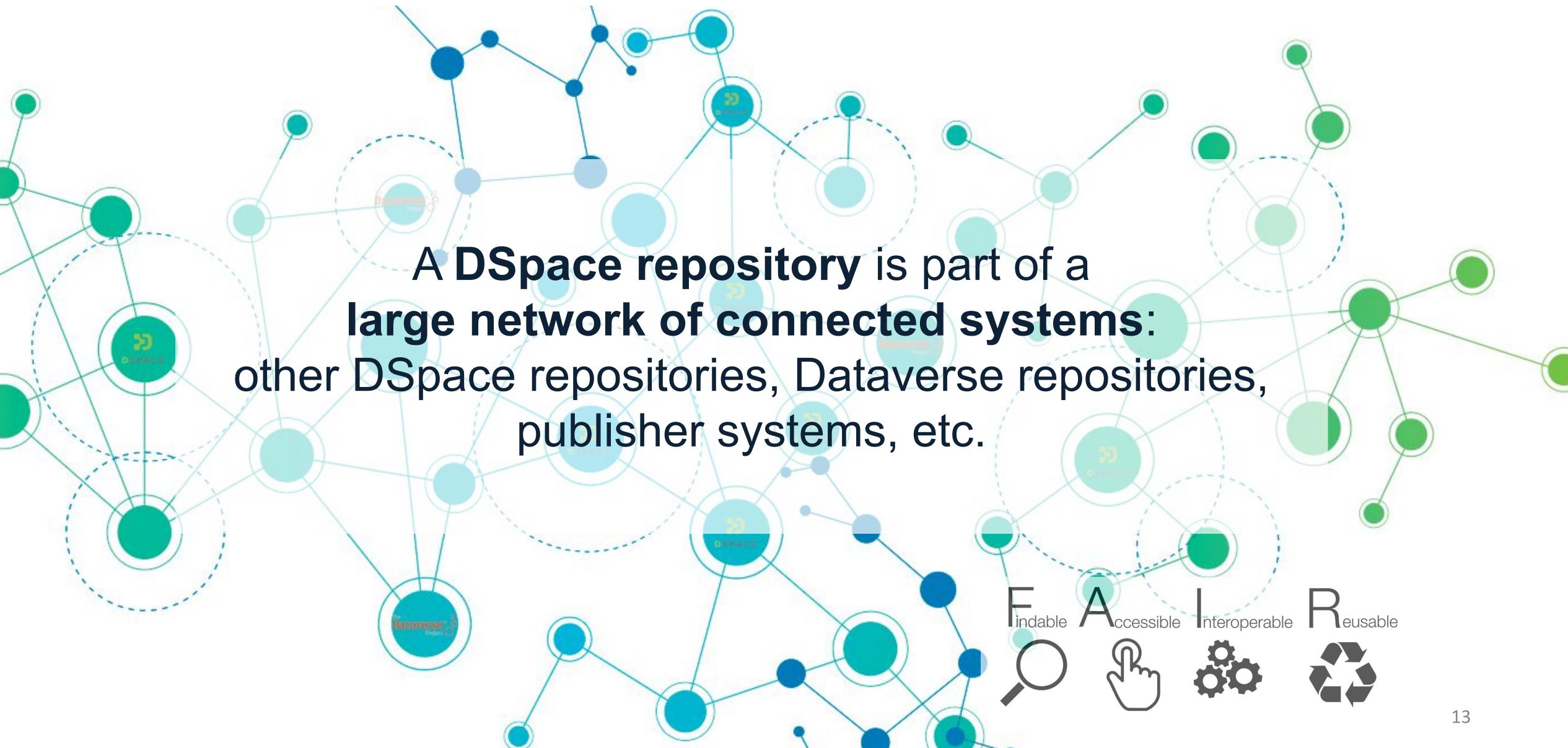


DSpace 8.0 Feature Preview (Part 1)

OpenAIRE Data Correction & Publication Claim, COAR Notify, and more...



DSpace 8 Features - Enhanced interoperability





DSpace 8 Features - Publication Claim

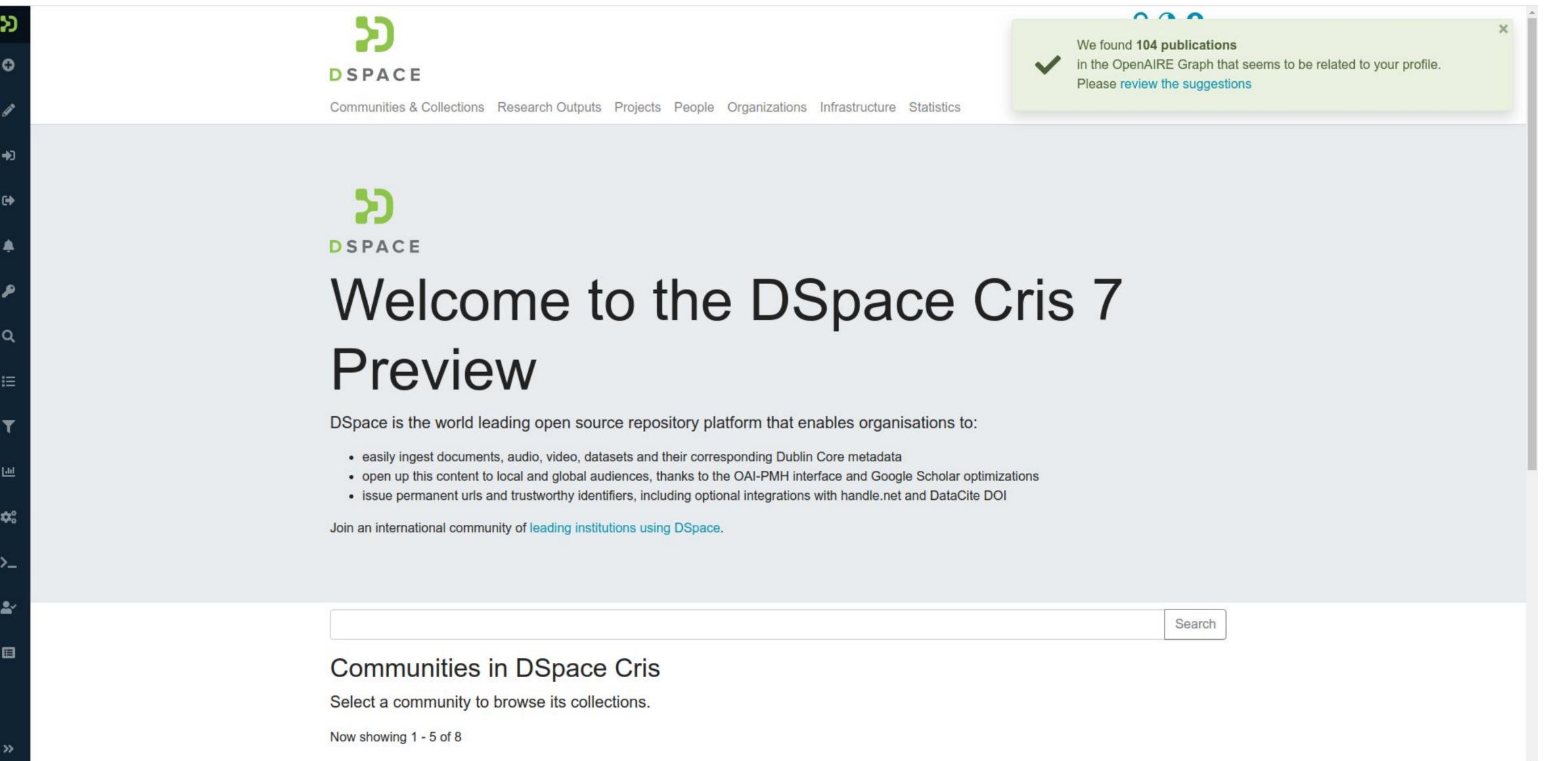
- Content exists elsewhere: assure that your repository showcases all the production of your community
- It is the result of the OpenAIRE ELD project awarded by 4Science back in 2020 and first implemented in DSpace-CRIS in 2021 now finally available in DSpace 8

A new researcher joins the institution and logins for the first time in the repository.

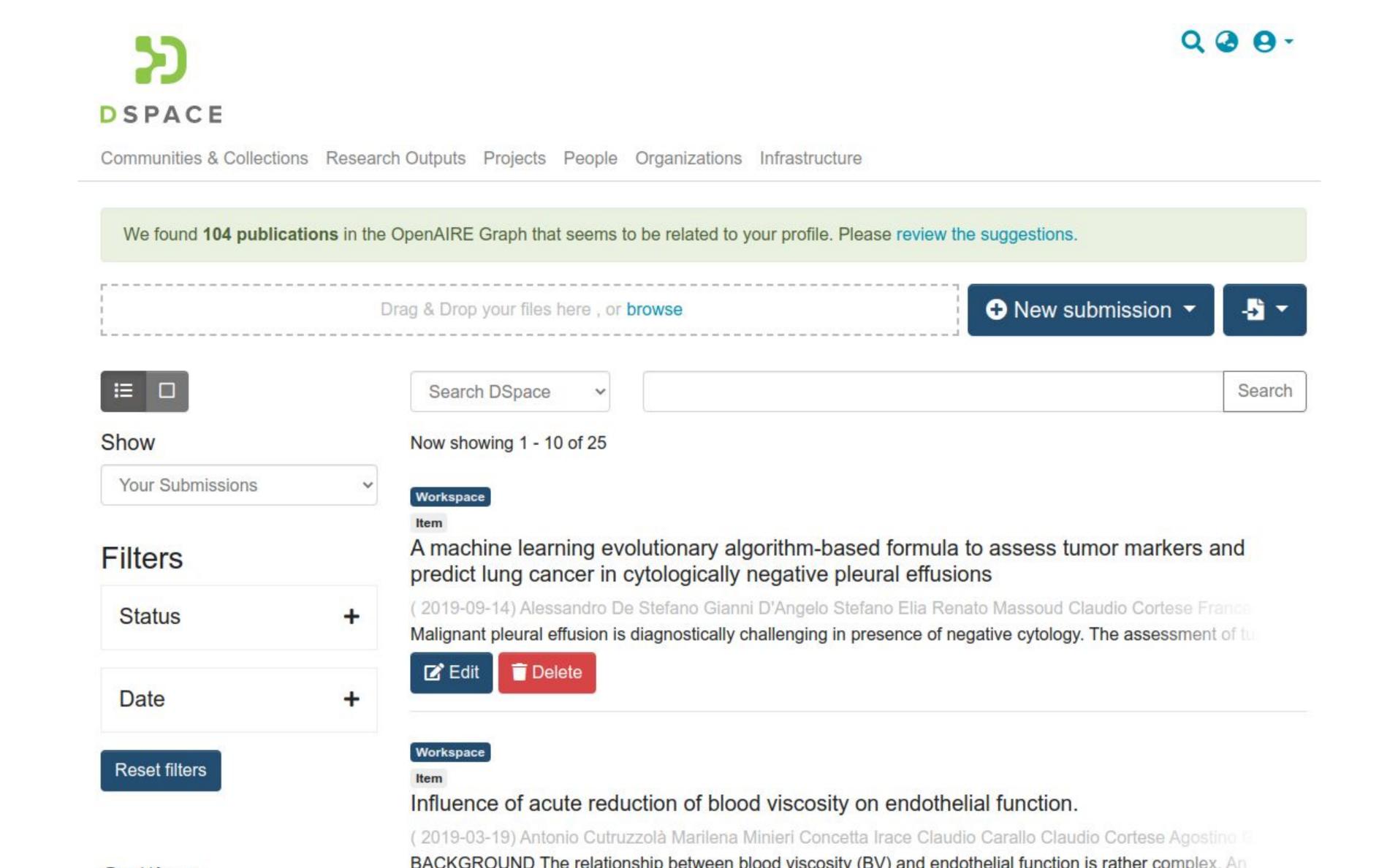
The publication claim service found most of their publications and prompts for import.

The researcher reviews the list, confirms the authorship and imports the publication saving a significant amount of time....











Suggestion for Claudio Cortese from the OpenAIRE Graph ✓ Approve & import Selected ▼ Select / Deselect All (10) Not mine Selected Now showing 1 - 10 of 110 * Processi di trasformazione nel suburbio di Mediolanum tra tarda età repubblicana e media età imperiale. Il caso dell'area dell'Università Cattolica CORTESE, CLAUDIO **Total Score** Nell'area oggi occupata dall'Università Cattolica del Sacro Cuore di Milano a partire dal 1986 scavi di emergenza 100.00 hanno messo in luce una porzione del suburbio occidentale di Mediolanum, e in particolare una realtà insediativa suburbana di età imperiale. Un'ampia area di tale insediamento è stata oggetto della presente ricerca che See evidence ✓ Approve & import • Semantic Search and Browsing nell'ambito dei Beni Culturali Cortese, Claudio Negli ultimi anni, il mondo dei beni culturali si sta rivelando una delle aree più promettenti e stimolanti per quanto **Total Score** concerne la sperimentazione e la diffusione degli standard e delle tecnologie che rientrano nell'ambito del 100.00 \checkmark "Semantic Web". All'organizzazione dei dati secondo gli standard semantici si accompagna la necessità di Approve & import * Not mine See evidence MTHFR gene polymorphism, homocysteine and cardiovascular disease. (2008-06-03) Corradino Motti: Claudio Cortese AbstractHomocysteine is an emerging new risk factor for cardiovascular disease. It is a thiol compound derived Total Score from methionine and involved in two main metabolic pathways: the cycle of activated methyl groups, requiring 100.00 folate and vitamin B12 as cofactors, and the transsulfuration pathway to cystathionine and cysteine require See evidence ✓ Approve & import ¬ Not mine

Taking advantage of a side effect of isotretinoin.

(2004-03-02) Claudio Cortese; Rosamaria Corona

Question: Do young adults who develop hypertriglyceridemia after isotreting in therapy for acree have an inherited







Communities & Collections All of DSpace ▼

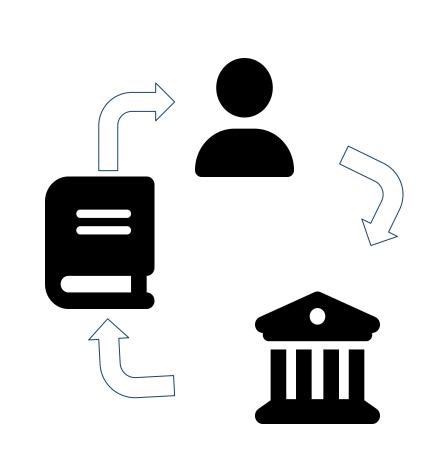


Home • Publication Claim

Publication Claim

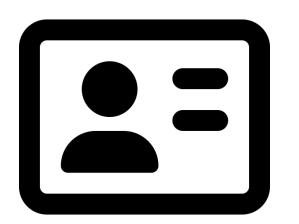
Now showing 1 - 10 of 41 **Researcher Name** Actions Bollini, Andrea Review 116 suggestion(s) 9 Cortese, Claudio Review 104 suggestion(s) 9 Fazio, Riccardo Review 16 suggestion(s) 9 Mornati, Susanna Review 4 suggestion(s) 9





Configurable entities

Requires:



Researcher Profile



- Show reliable and accurate information in your repository
- It is the result of two innovative projects, the previous mentioned <u>OpenAIRE ELD project</u> and the <u>ELD ADVANCE project</u> supported by the European Open Science Cloud Digital Innovation Hub

A repository manager of a repository indexed in OpenAIRE

login in the repository and see the list of improvements and

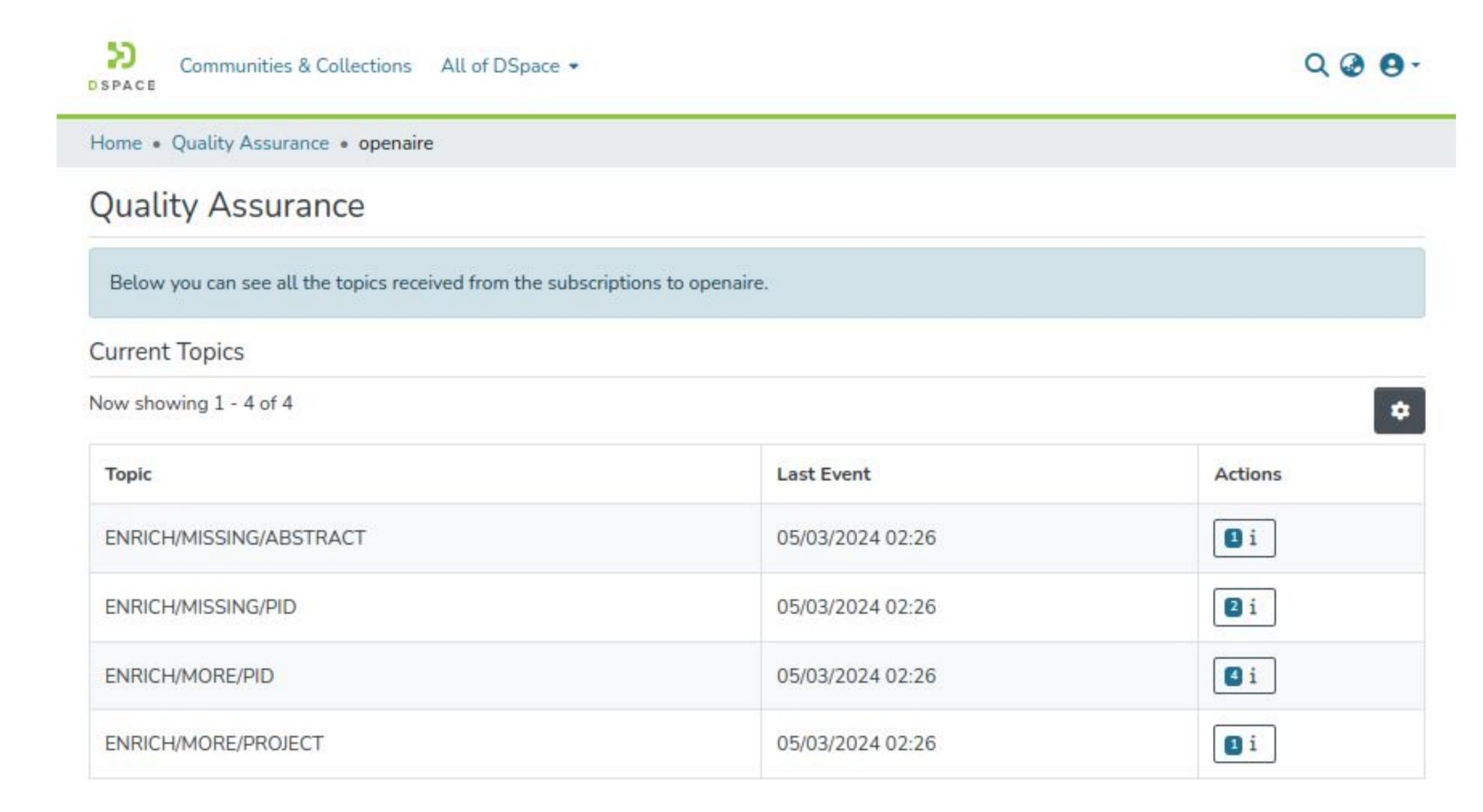
corrections identified, among others one publication that has a PMID that

was unknown to the repository and a link to a project.

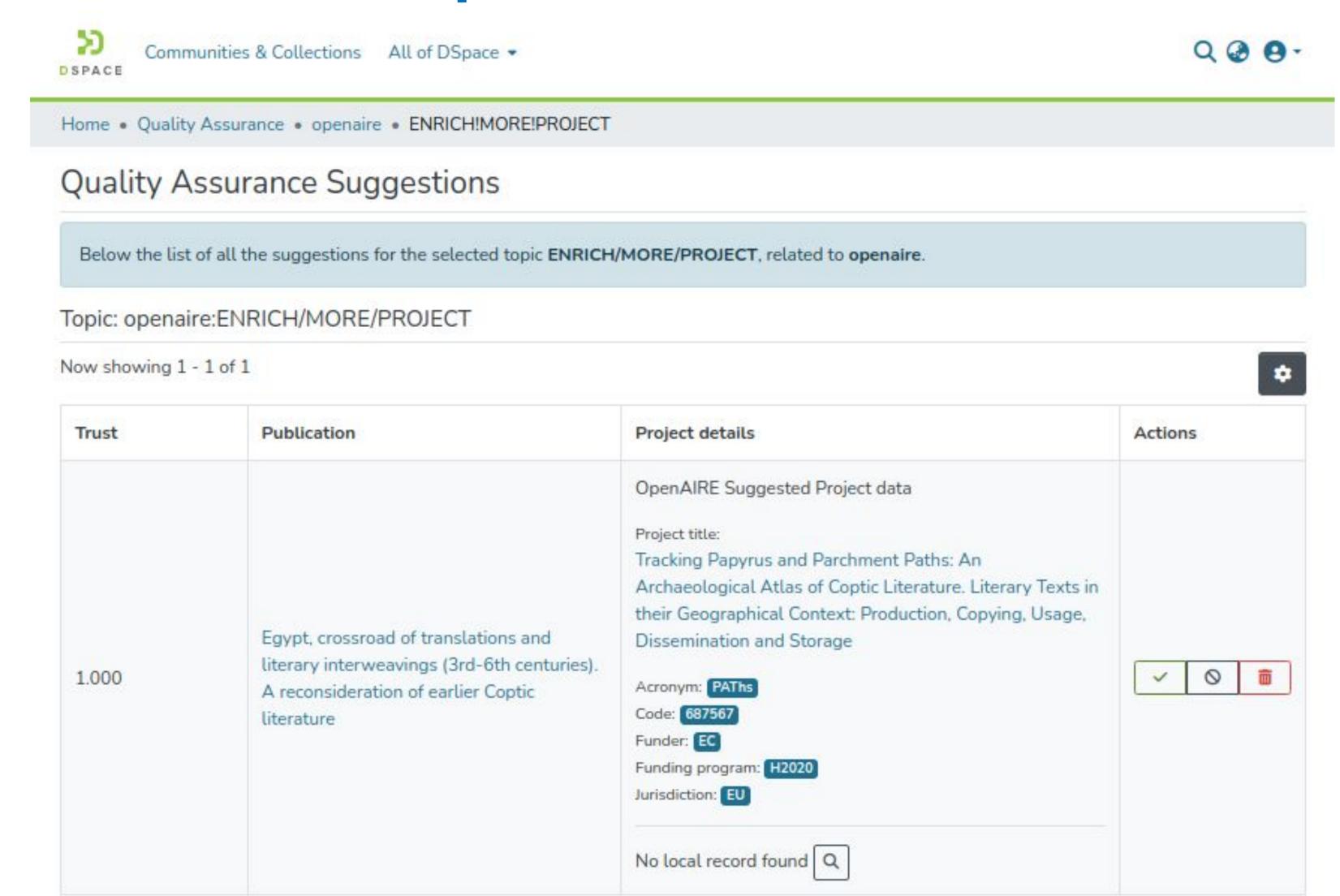
They click on the "accept the suggestion" button and the new information

is stored in the local record.

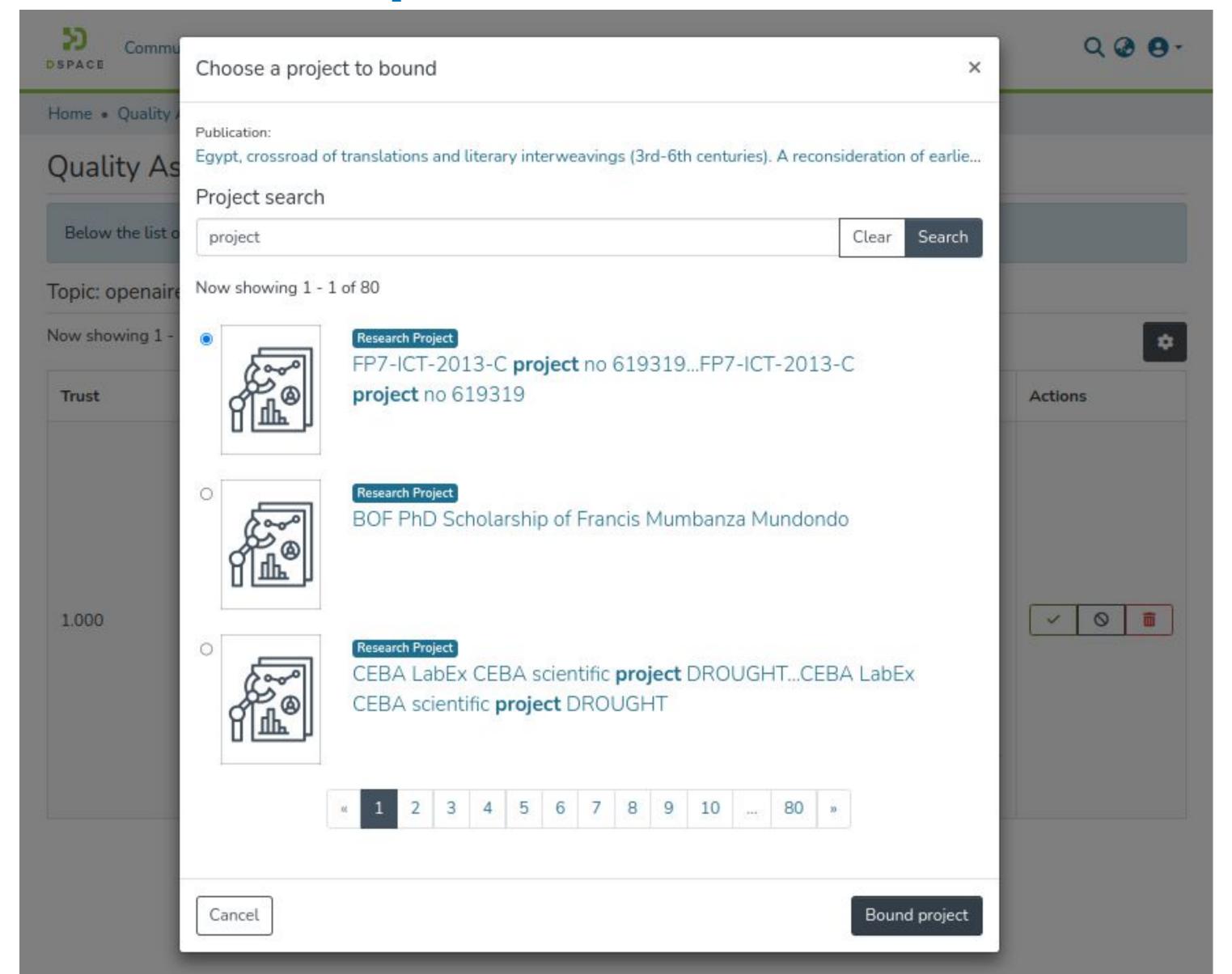








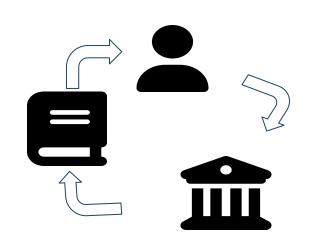








Your repository must be registered as an OpenAIRE provider

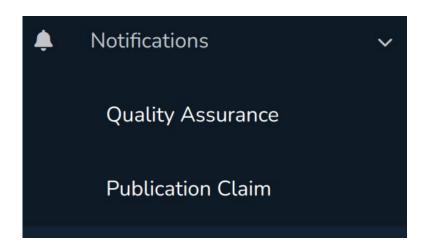


Configurable entities





Researcher Profile

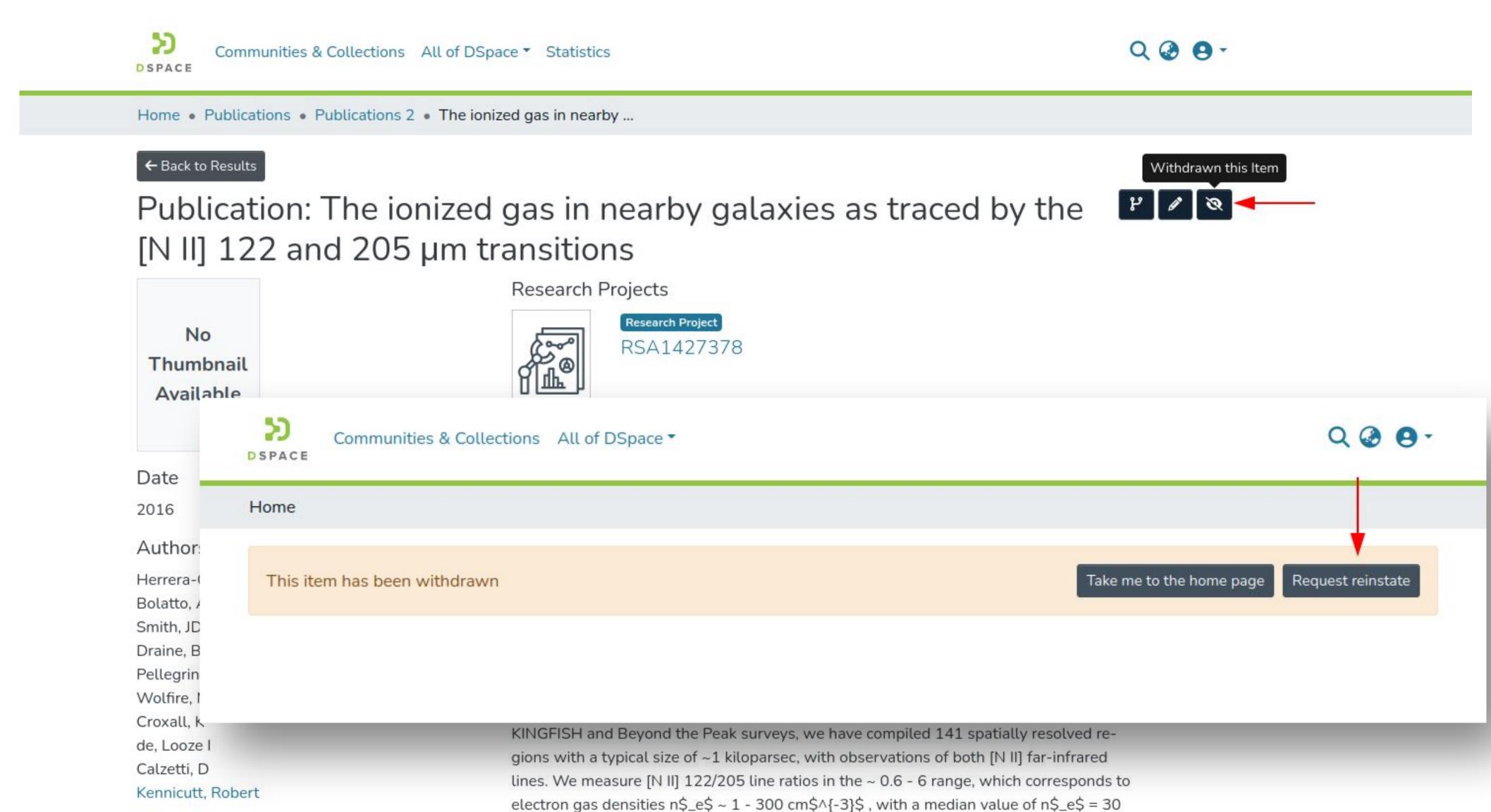


Quality Assurance



DSpace 8 Features - DSpaceUsers Data Correction

Show 10 more

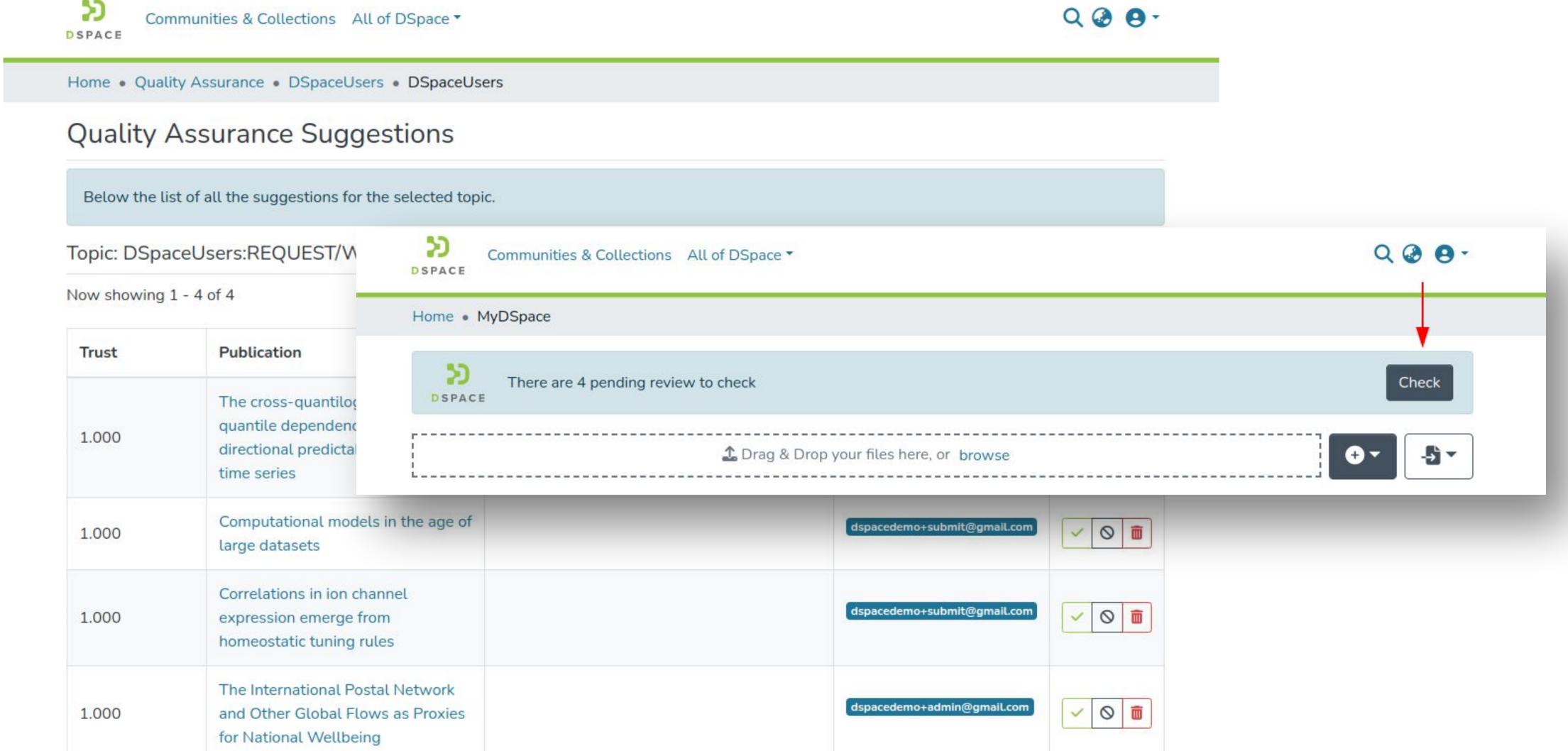


cm\$^{-3}\$. Variations in the electron density within individual galaxies can be as a high

as a factor of ~ 50, frequently with strong radial gradients. We find that n\$_e\$ increases



DSpace 8 Features - DSpaceUsers Data Correction





DSpace 8 Features - DSpaceUsers Data Correction

Now showing 1 - 4 of 4

	-
1	
	쉞
2000	

Trust	Publication	Reasons	Requested by	Actions
1.000	The cross-quantilogram: Measuring quantile dependence and testing directional predictability between time series		dspacedemo+submit@gmail.com	✓ ○ m
1.000	Computational models in the age of large datasets		dspacedemo+submit@gmail.com	✓ ○ m
1.000	Correlations in ion channel expression emerge from homeostatic tuning rules		dspacedemo+submit@gmail.com	✓ ○ m
1.000	The International Postal Network and Other Global Flows as Proxies for National Wellbeing		dspacedemo+admin@gmail.com	✓ ○ m



The COAR Notify Initiative is developing and accelerating community adoption of a standard, interoperable, and decentralised approach (using Linked Data Notifications) to link research outputs hosted in the distributed network of repositories with resources from external services, such as overlay-journals and open peer review services.

notify



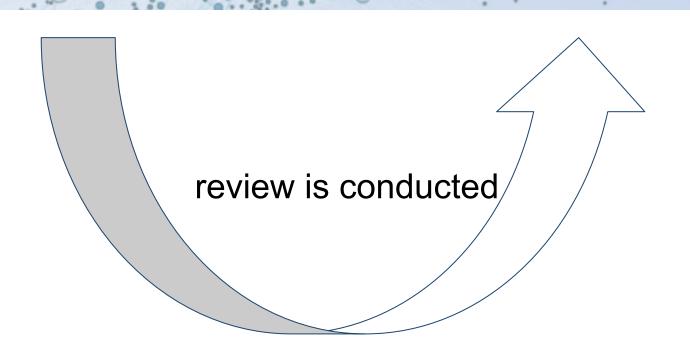


Link to the review added in the metadata

Link to the endorsement added in the metadata

Peer Community in

PCI, a free recommendation process of scientific preprints based on peer reviews and a journal







I have a publication that uses your dataset



DSPACE

Link to a dataset is in the metadata

check if automatic notification should be triggered LDNMessageConsumer

Link the dataset back to DSpace



Link the dataset back to Dataverse is added to the metadata



I have a dataset that is described by a paper that you hold

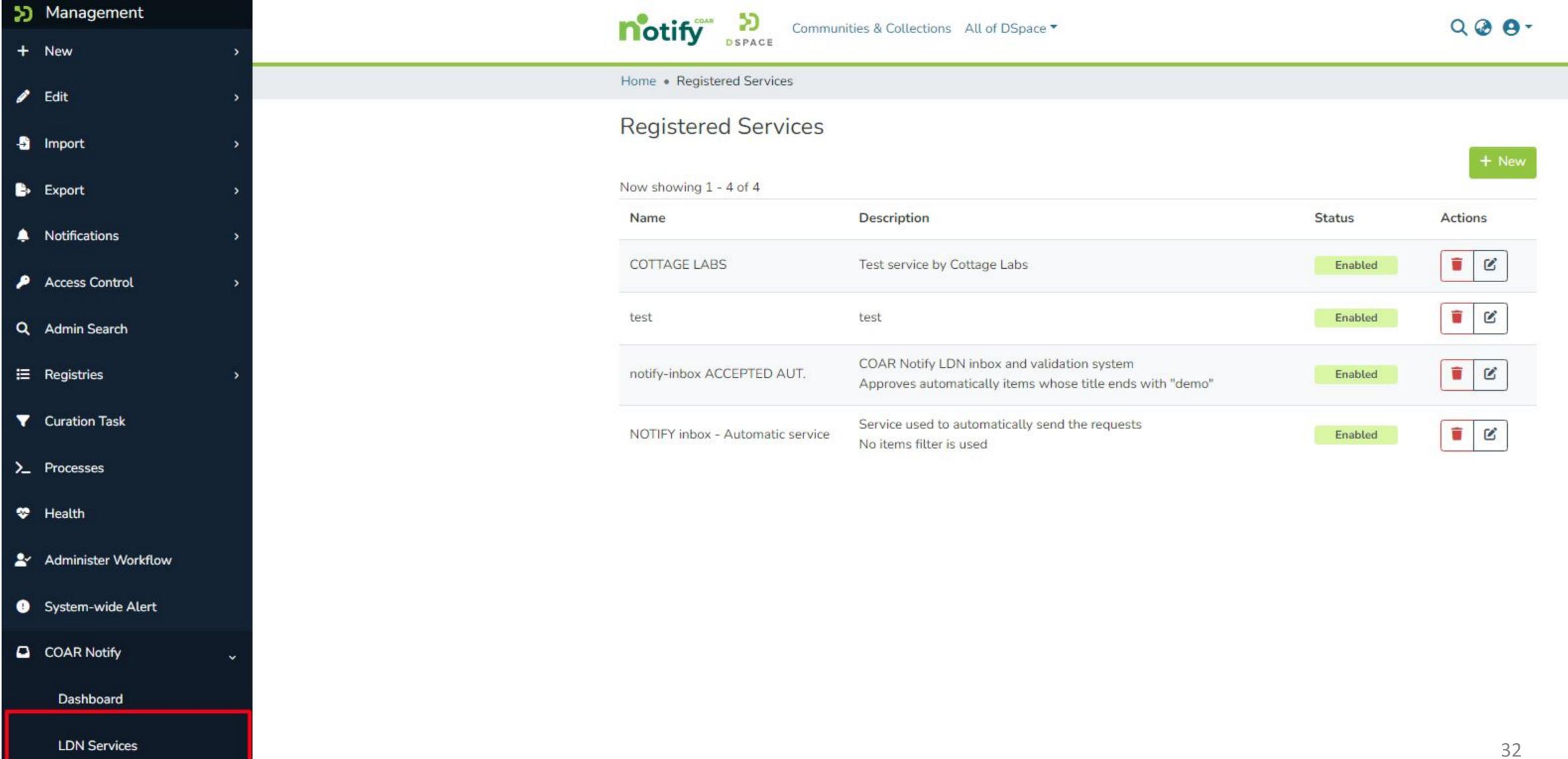


Link to a dspace item is in the metadata

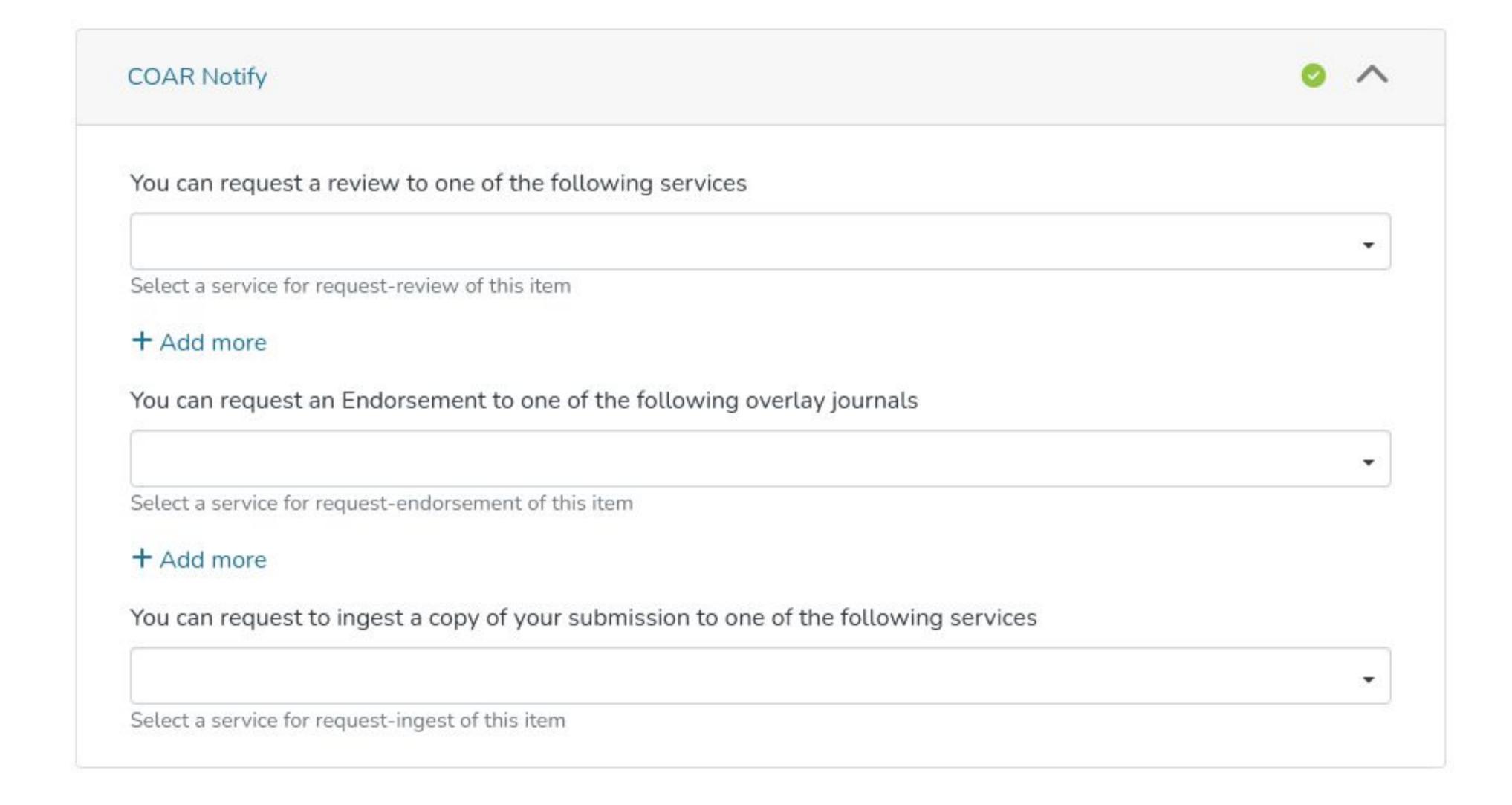
LDNInboxController

check if dataverse is trusted create a correction suggestion

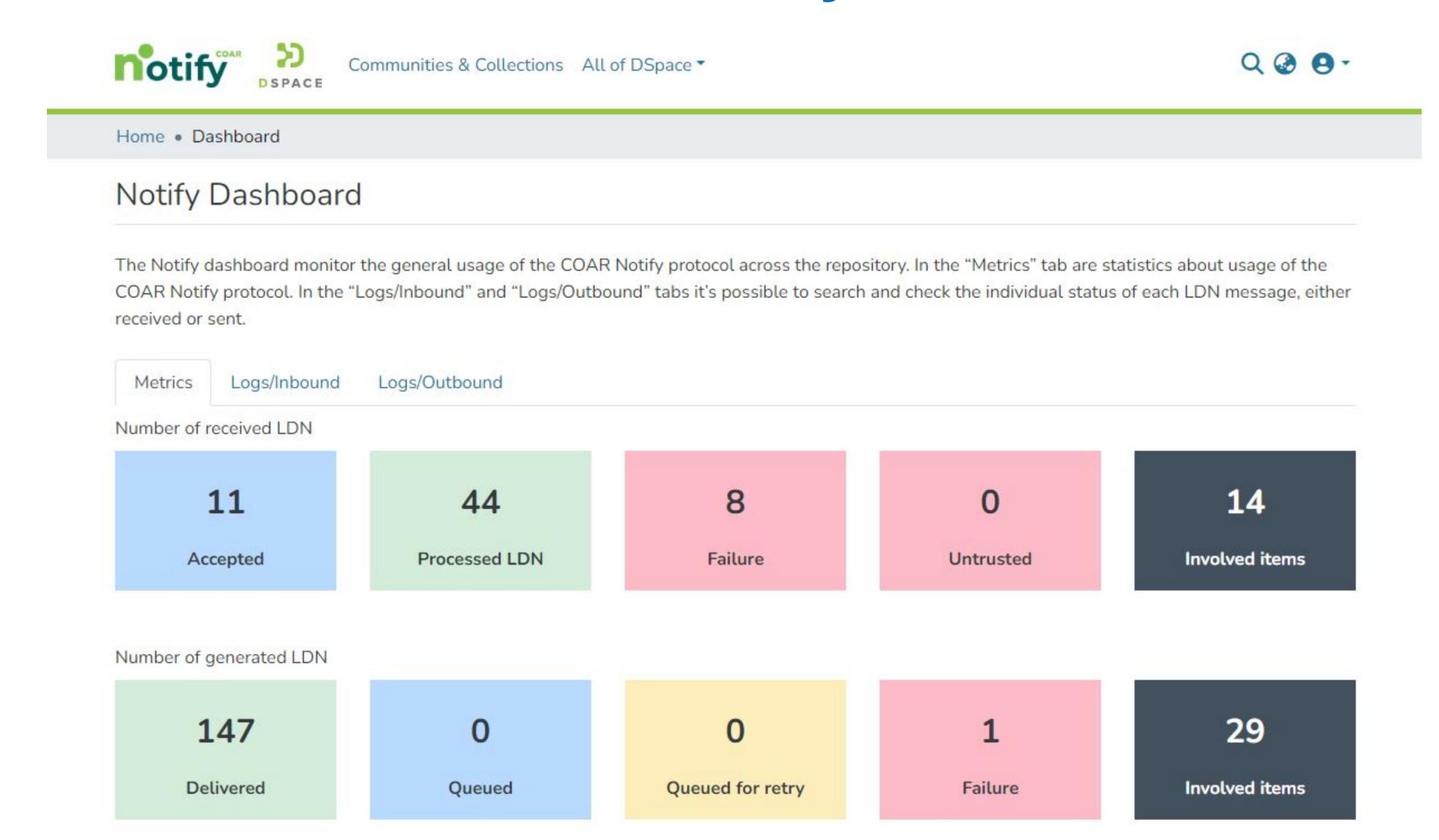




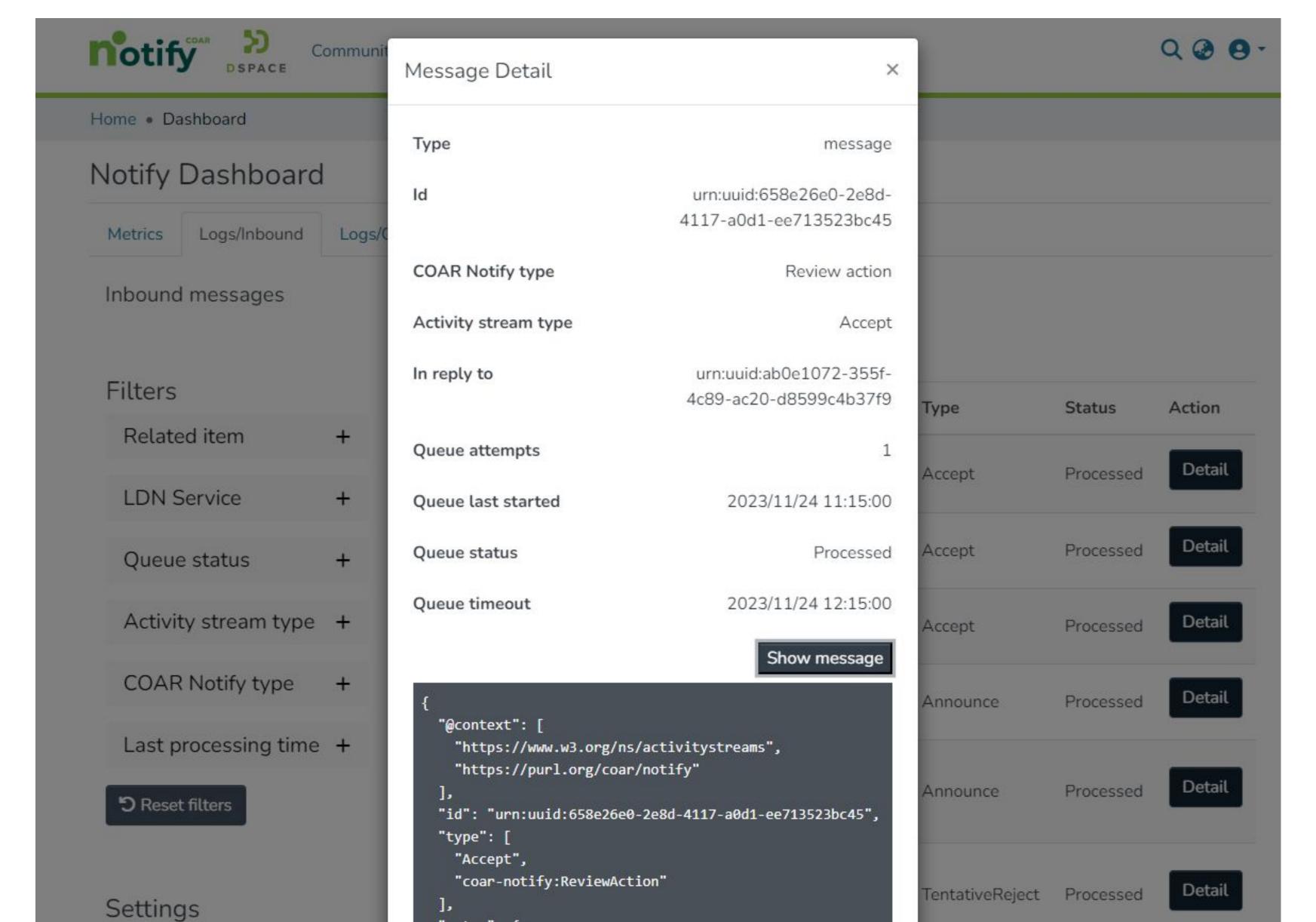




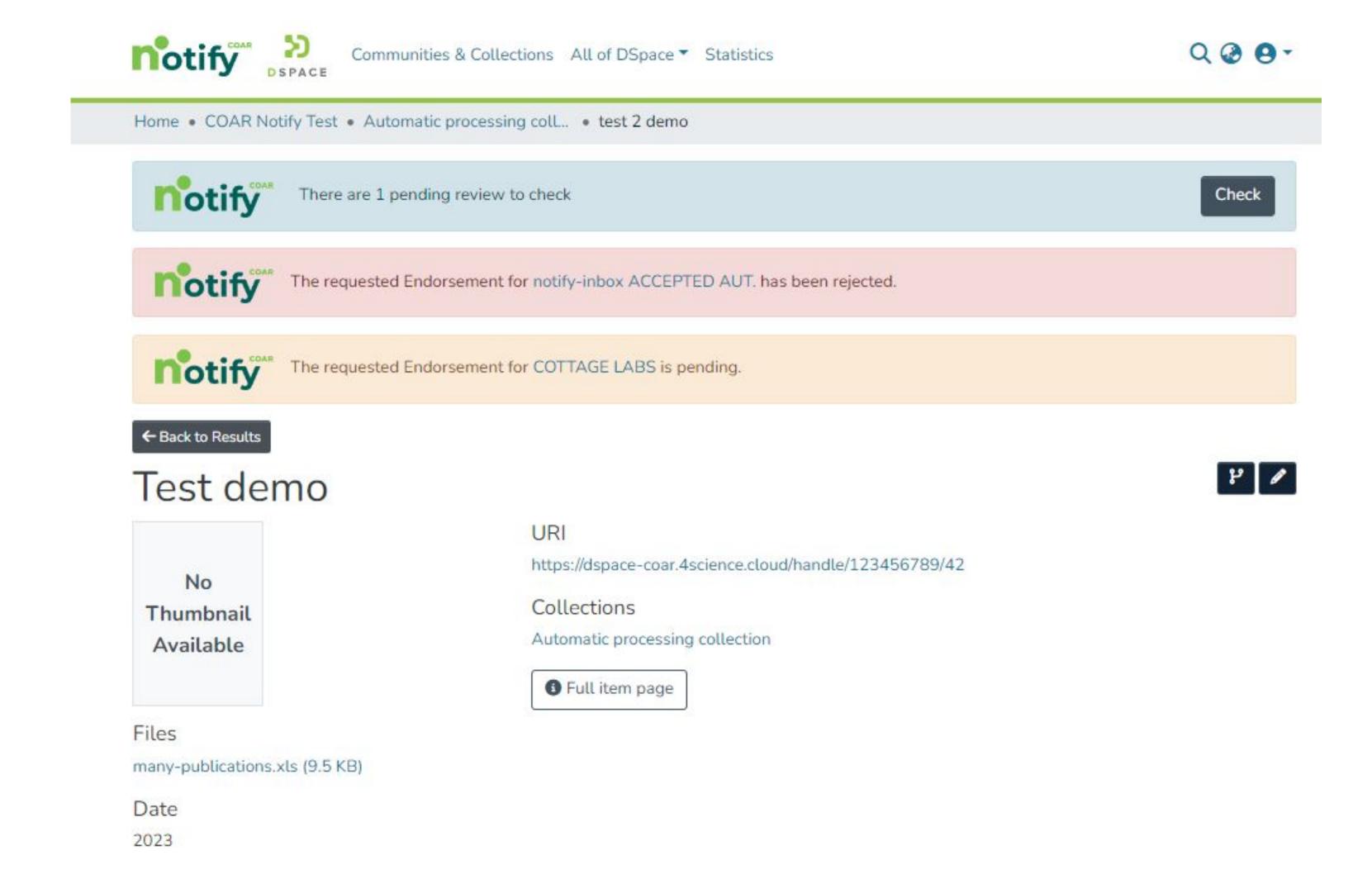






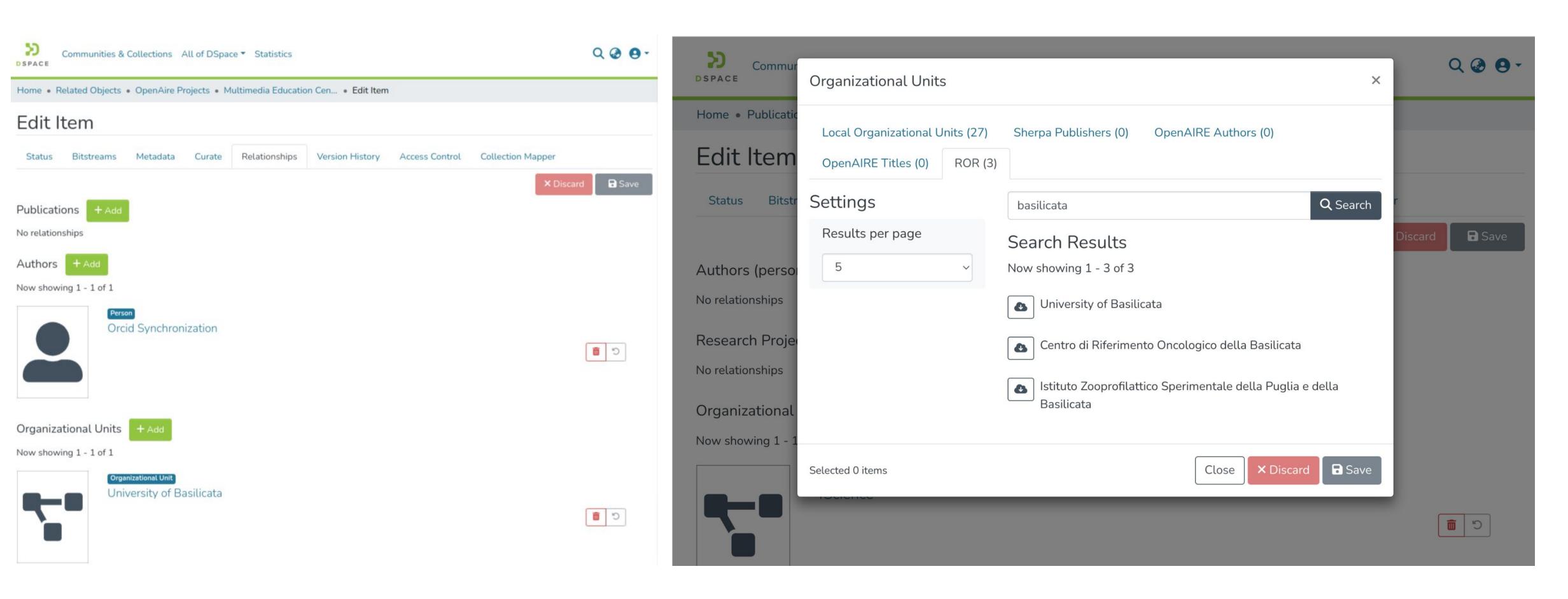






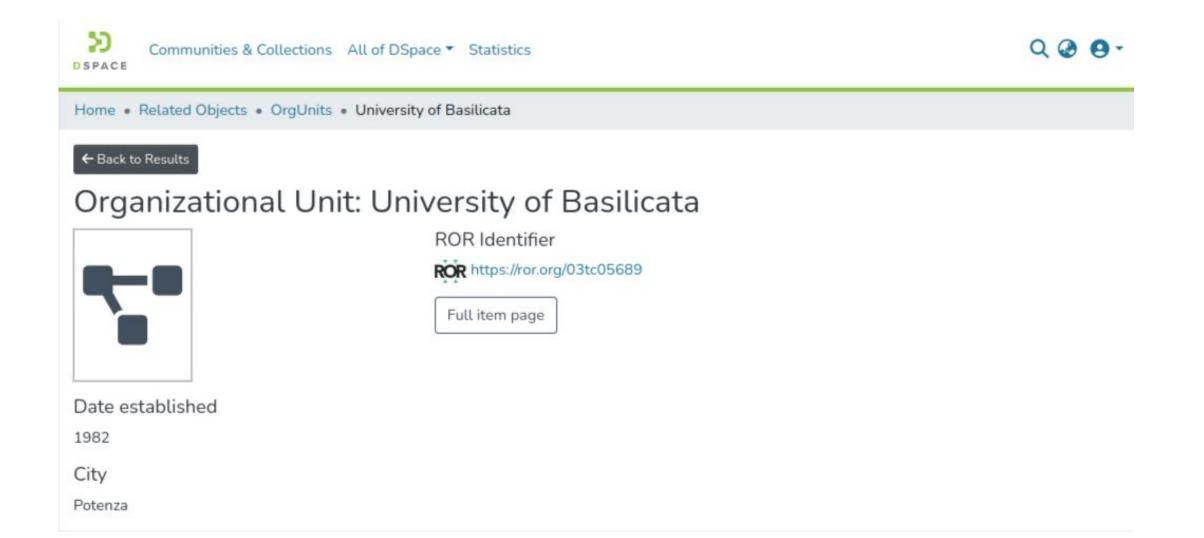


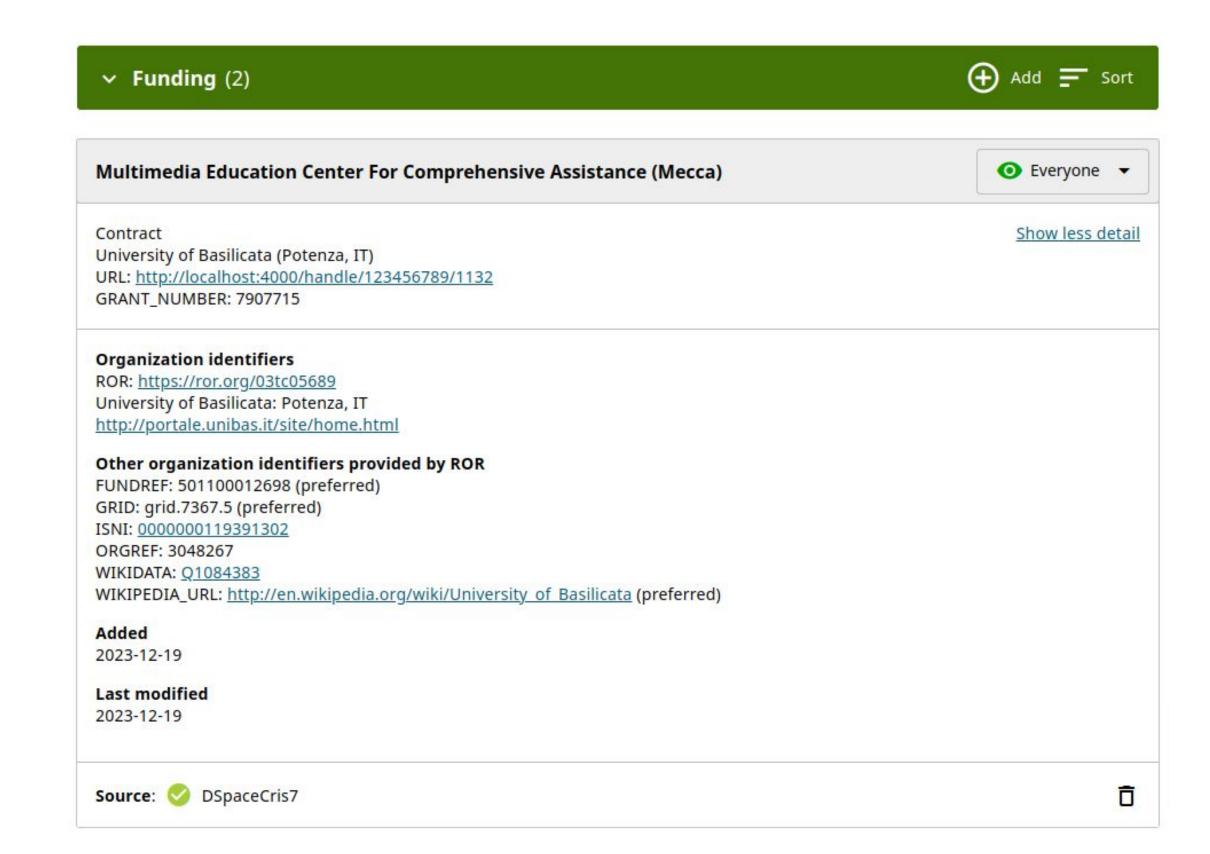
DSpace 8 Features - ROR Integration





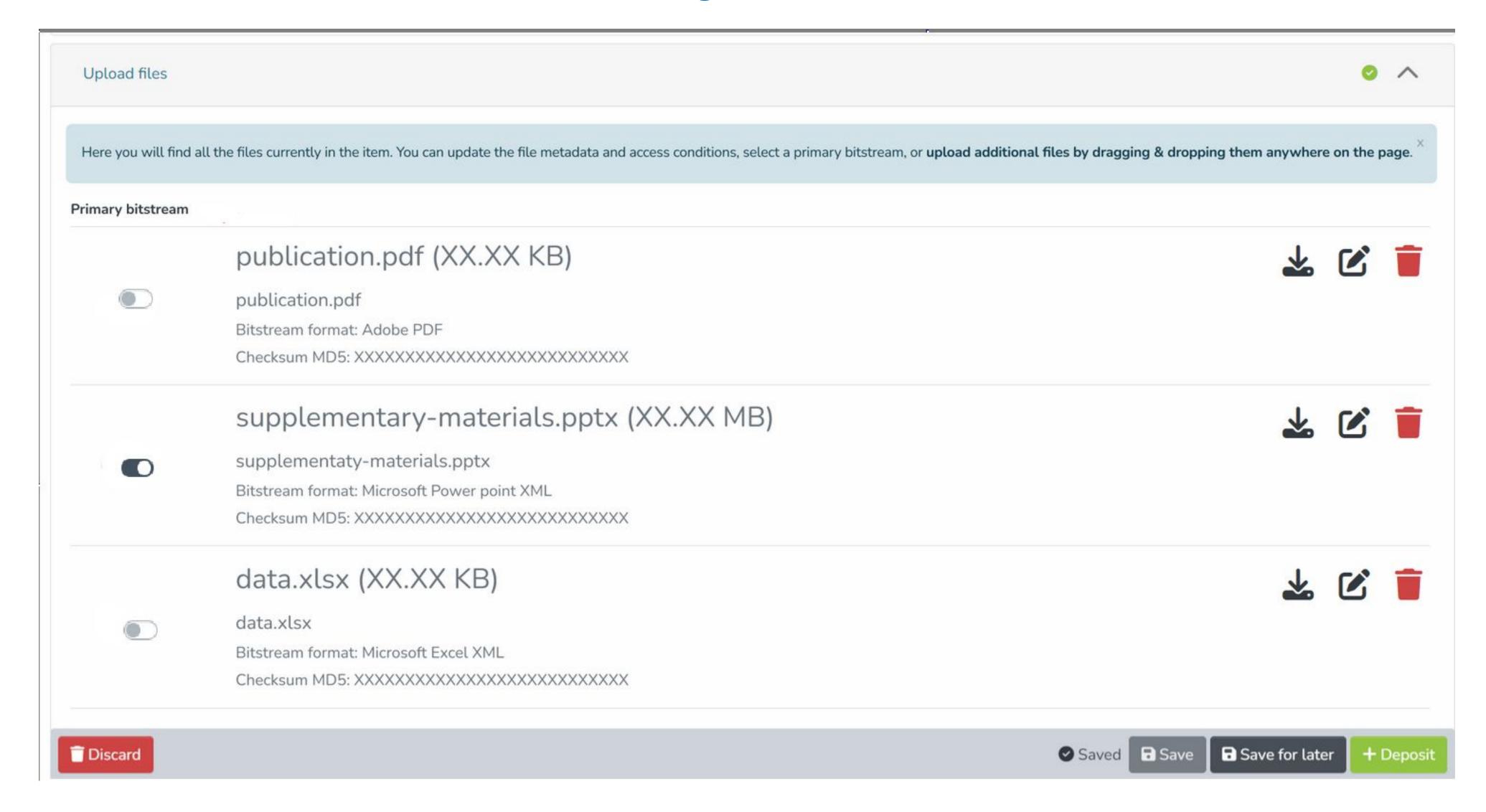
DSpace 8 Features - ROR Integration





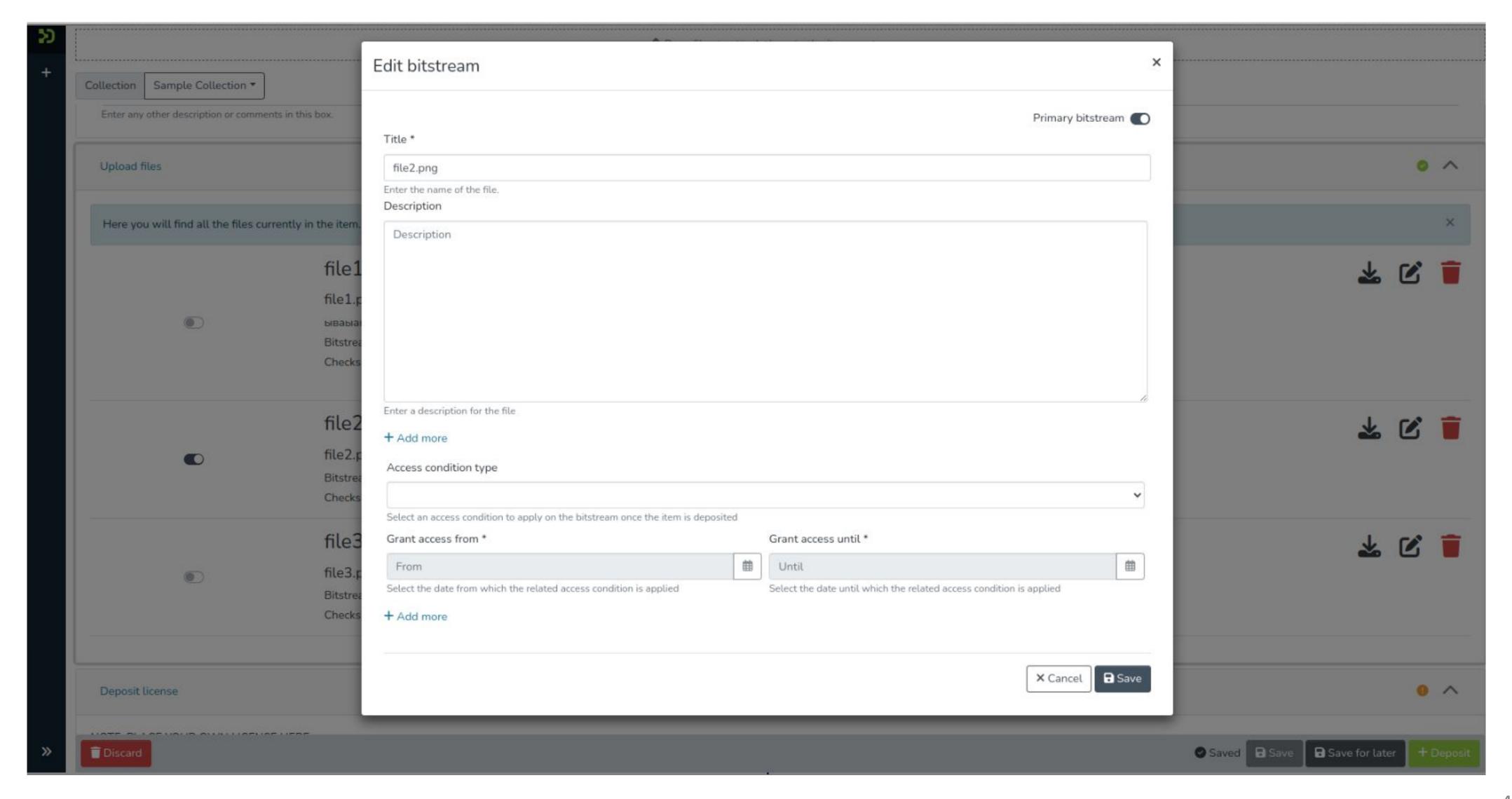


DSpace 8 Features - Primary bitstream





DSpace 8 Features - Primary bitstream





DSpace 8 Features - Primary bitstream



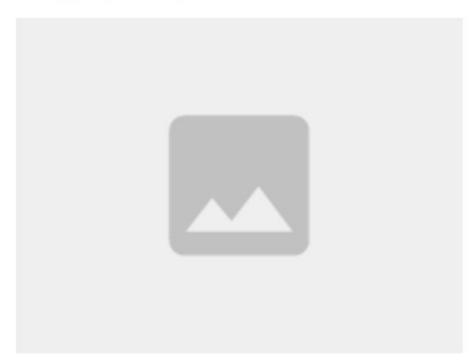
Communities & Collections All of DSpace ▼ Statistics



Home • Publications • Articles • Practitioner Profile: An Int...

← Back to Results

Publication: Practitioner Profile: An Interview with Syble Solomon



Files

Primary An Interview with Syble Solomon.pdf (493.17 KB)

book-solid.png (5.87 KB)

Date

2016

Authors

Solomon, Syble

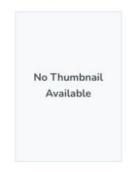
Journal Title

Journal of Financial Therapy

Volume Title

Journal of Financial Therapy Volume 7

Journal Issue



Journal Issue

Volume 7, Issue 1 7 - 1

Abstract

Syble Solomon is a speaker on the psychology of money and the founder and president of LifeWise Strategies. She is best known for Money Habitudes® a deck of cards (and now an online version) that makes it easy to talk about money and discover what motivates our financial behaviors. Before becoming interested in why people manage money as they do, she had careers in early childhood special education, gerontology and executive coaching. Seemingly unrelated, they all provided experience training, developing educational material and empowering people at all socio-economic levels to work through challenging times and transitions. An excellent background for helping people work through money-related issues!

Keywords

financial therapy, money habits, money habitudes, financial tools

Citation

Solomon, S. (2016). Practitioner Profile: An Interview with Syble Solomon. Journal of Financial Therapy, 7 (1) 6. https://doi.org/10.4148/1944-9771.1115

URI



DSpace 8.0 Feature Preview (Part 2)

Improvements to Processes, embedded Search, Duplicate Detection, Administrative Reports, and more...



Processes Overview + New Now showing 1 - 20 of 47 Start time (UTC) Finish time (UTC) Actions **Process ID Status** User Name 58 metadata-import Express Admin 2024-03-07 20:51:21 COMPLETED 2024-03-07 20:51:20 57 metadata-import Express Admin 2024-03-07 20:50:40 COMPLETED 2024-03-07 20:50:40 56 metadata-export-search COMPLETED Express Admin 2024-03-07 20:48:13 2024-03-07 20:48:13 54 COMPLETED metadata-export-search Express Admin 2024-03-07 20:42:31 2024-03-07 20:42:31 46 metadata-export-search Atmire Client 2024-03-04 19:04:33 2024-03-04 19:04:34 COMPLETED 45 metadata-export-search Express Admin COMPLETED 2023-12-19 21:36:50 2023-12-19 21:36:50 44 metadata-export-search COMPLETED Express Admin 2023-10-25 13:26:12 2023-10-25 13:26:12 Atmire Client 43 metadata-export-search 2023-06-26 22:21:19 2023-06-26 22:21:20 COMPLETED



Processes Overview

Running processes (11) >

Scheduled processes (13) >

Succeeded processes (3336) >

Failed processes (91) >



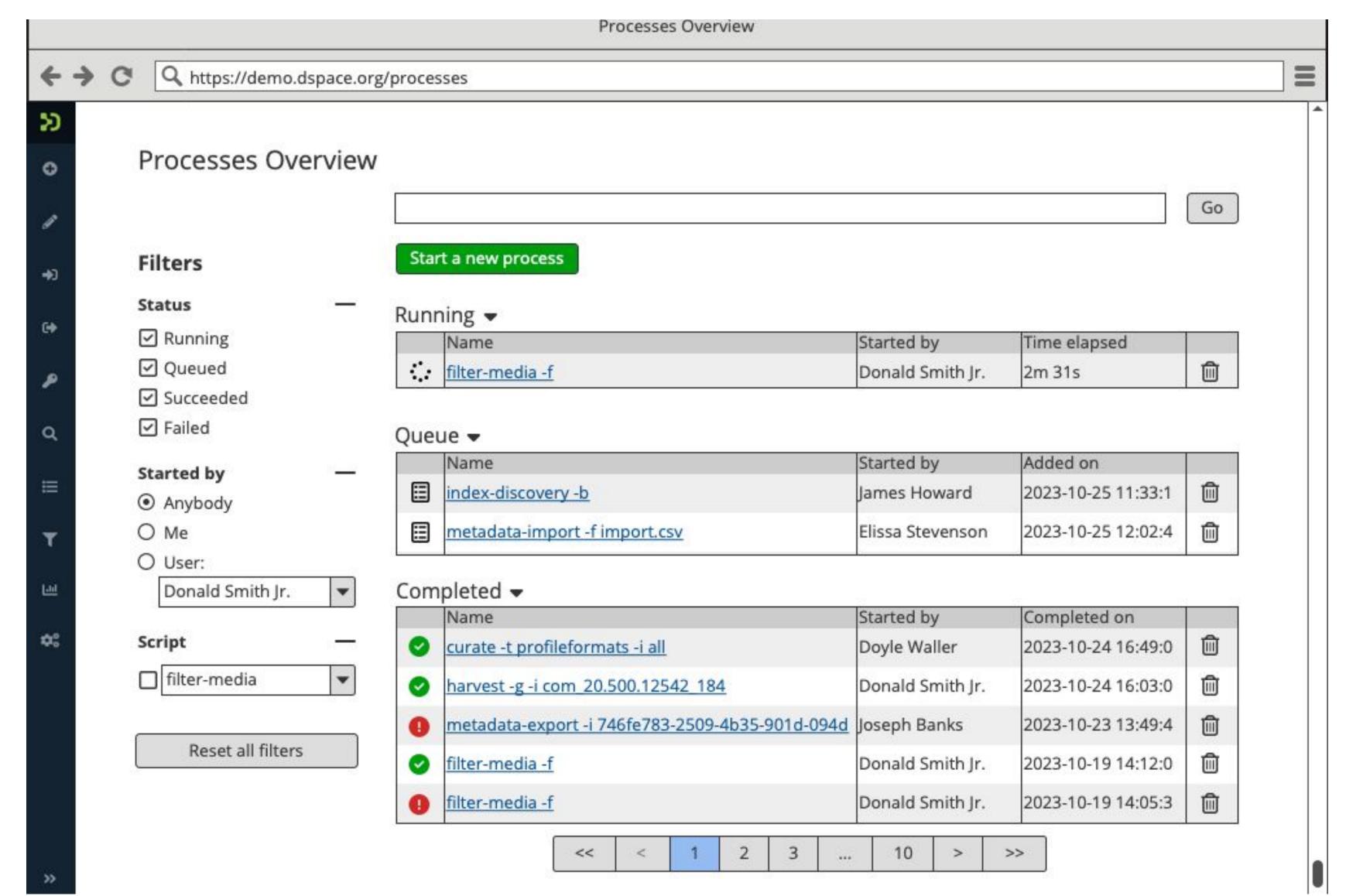


Succeeded processes 3336 v

Now showing 1 - 5 of 3336

Process ID	Name		User	Completed on	Actions
3471	metadata-export		Administrator	2024-04-11 09:28:42	
3470	metadata-import		Administrator	2024-04-09 15:06:20	
3469	metadata-import		Administrator	2024-04-09 15:05:29	
3468	harvest		Administrator	2024-04-09 15:04:21	
3467	harvest		Administrator	2024-04-09 15:04:07	
		« 1 2 3 4 !	5 668 »		







Basic Duplicate detection

Basic detection mechanism to prevent duplicate items in the repository.

- Compares item titles in SOLR with the submitted item's title
- Configurable degree of variation (uses levenshtein distance)

Duplicates can be found:

- By submitters or editors via a submission step to warn submitters or editors of potential duplicates
- By Workflow reviewers or editors through a warning for claimed and pooled tasks indicating the total number of potential duplicates.
- Through a new /duplicates REST item link which will search and retrieve a paged list of potential duplicates for any item



Basic Duplicate detection

Potential duplicates

Potential duplicates were detected. Please review the list below.

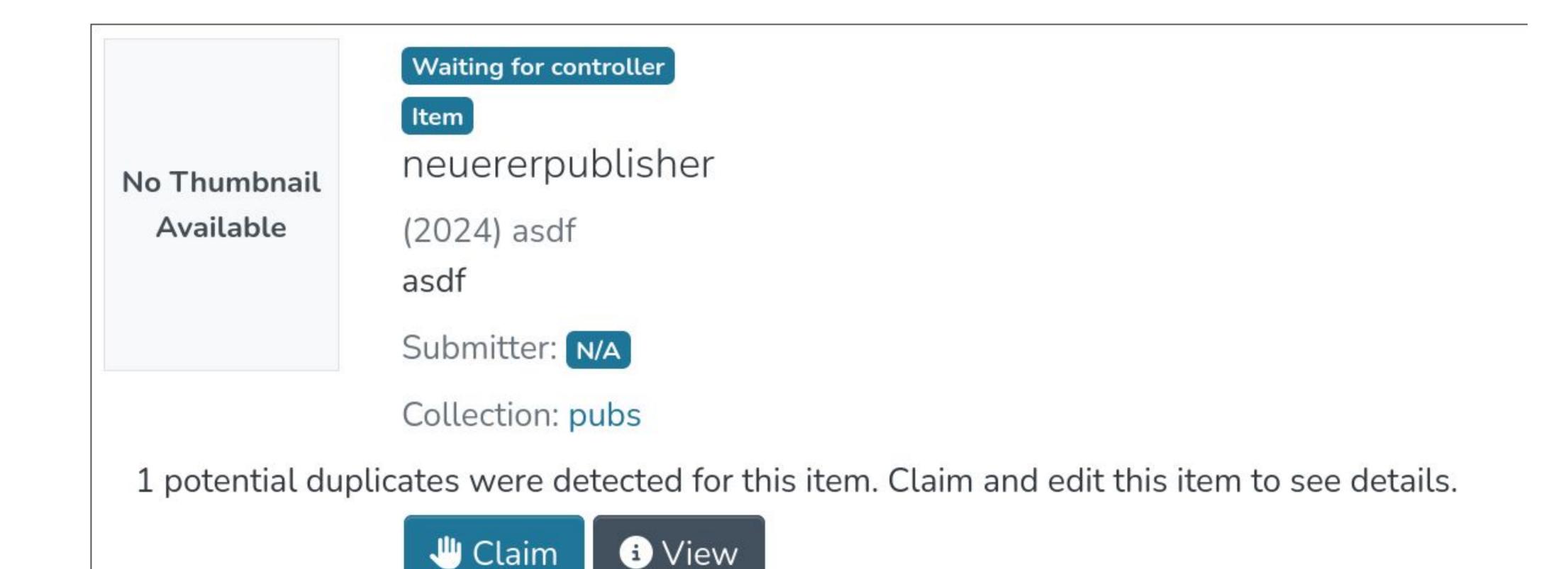
Neuerer Publisher

Title: Neuerer Publisher

Entity Type: Publisher



Basic Duplicate detection

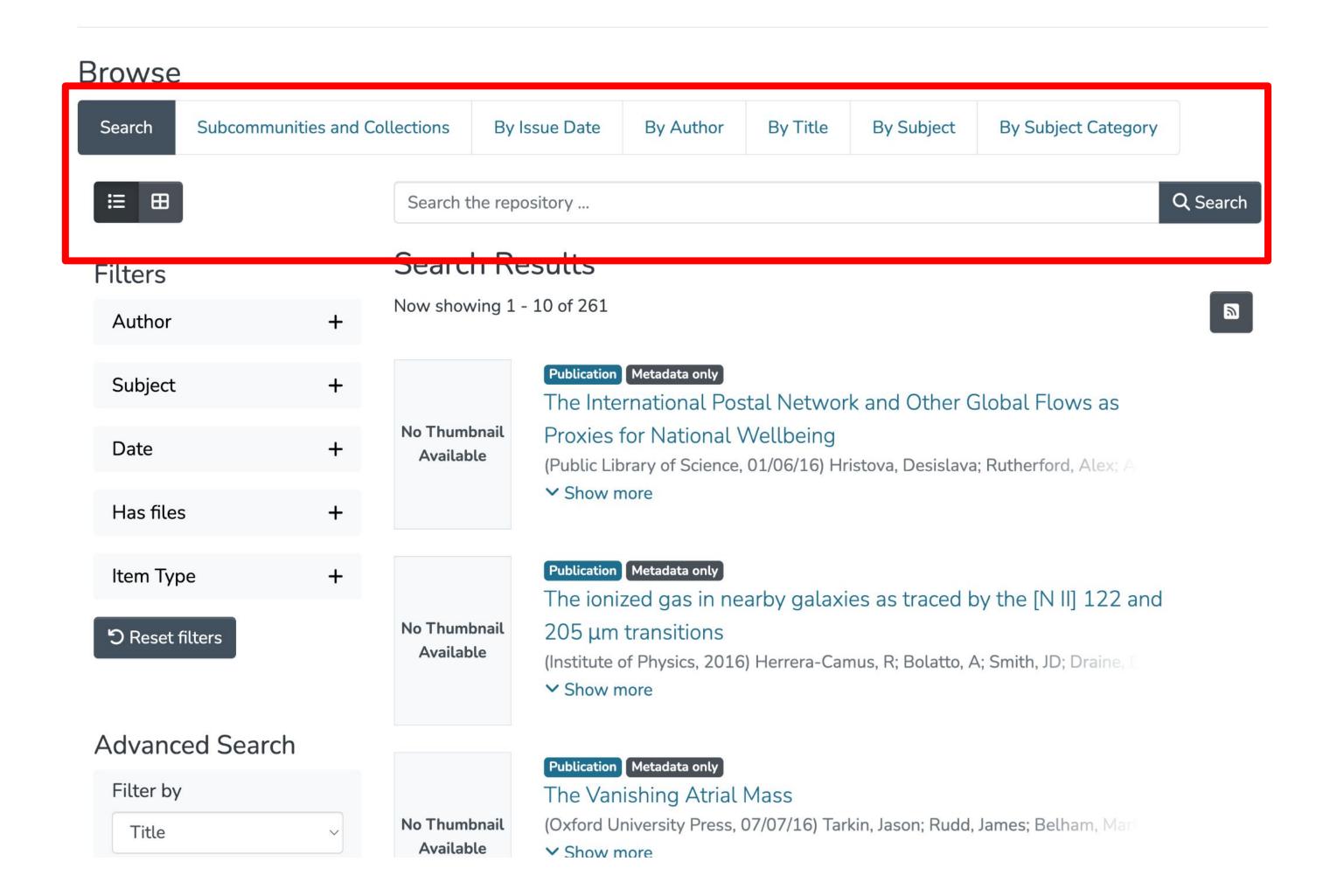




Search tab on Community/Collection pages

Publications

Permanent URI for this community https://demo7.dspace.org/handle/123456789/1

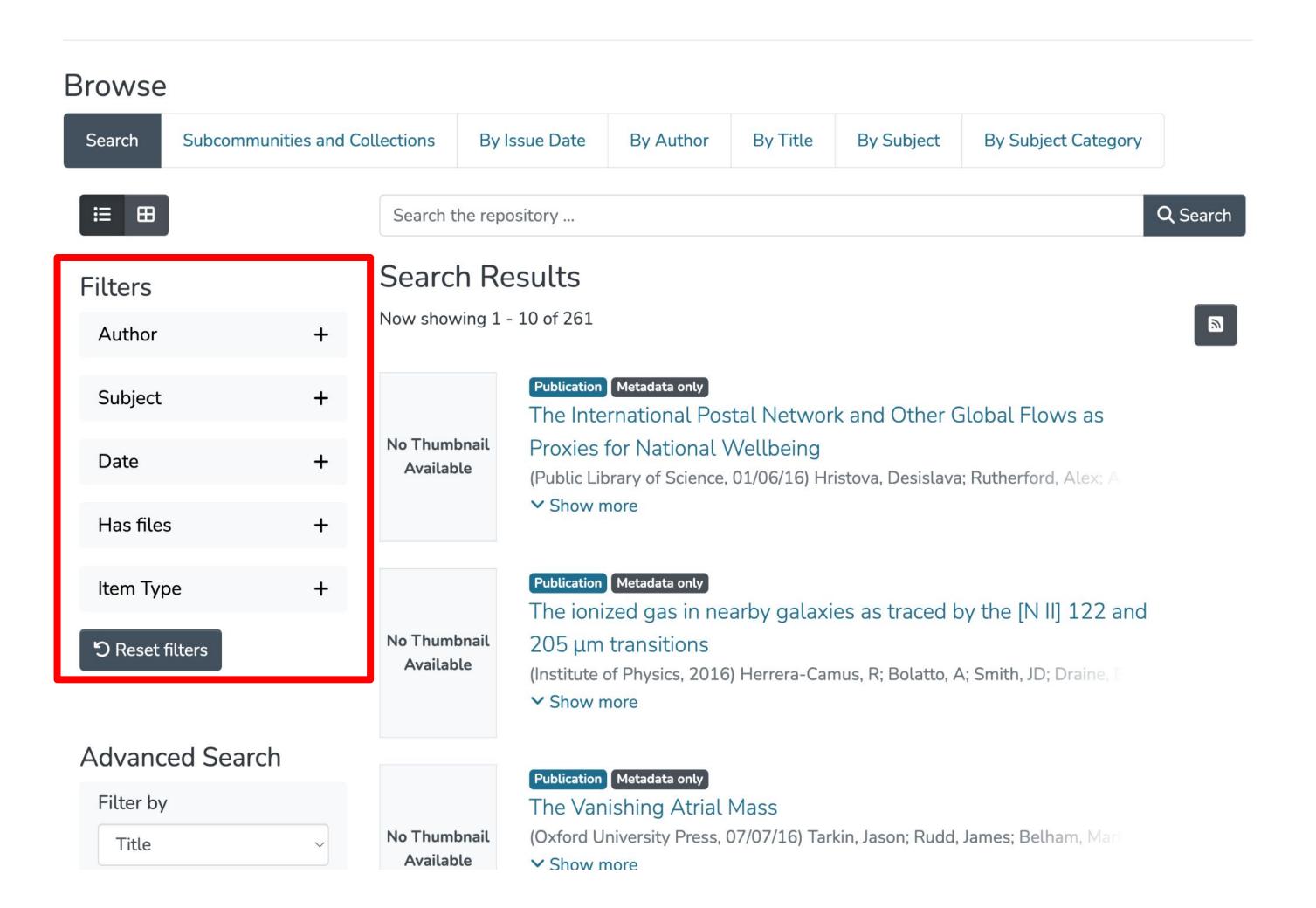




Search tab on Community/Collection pages

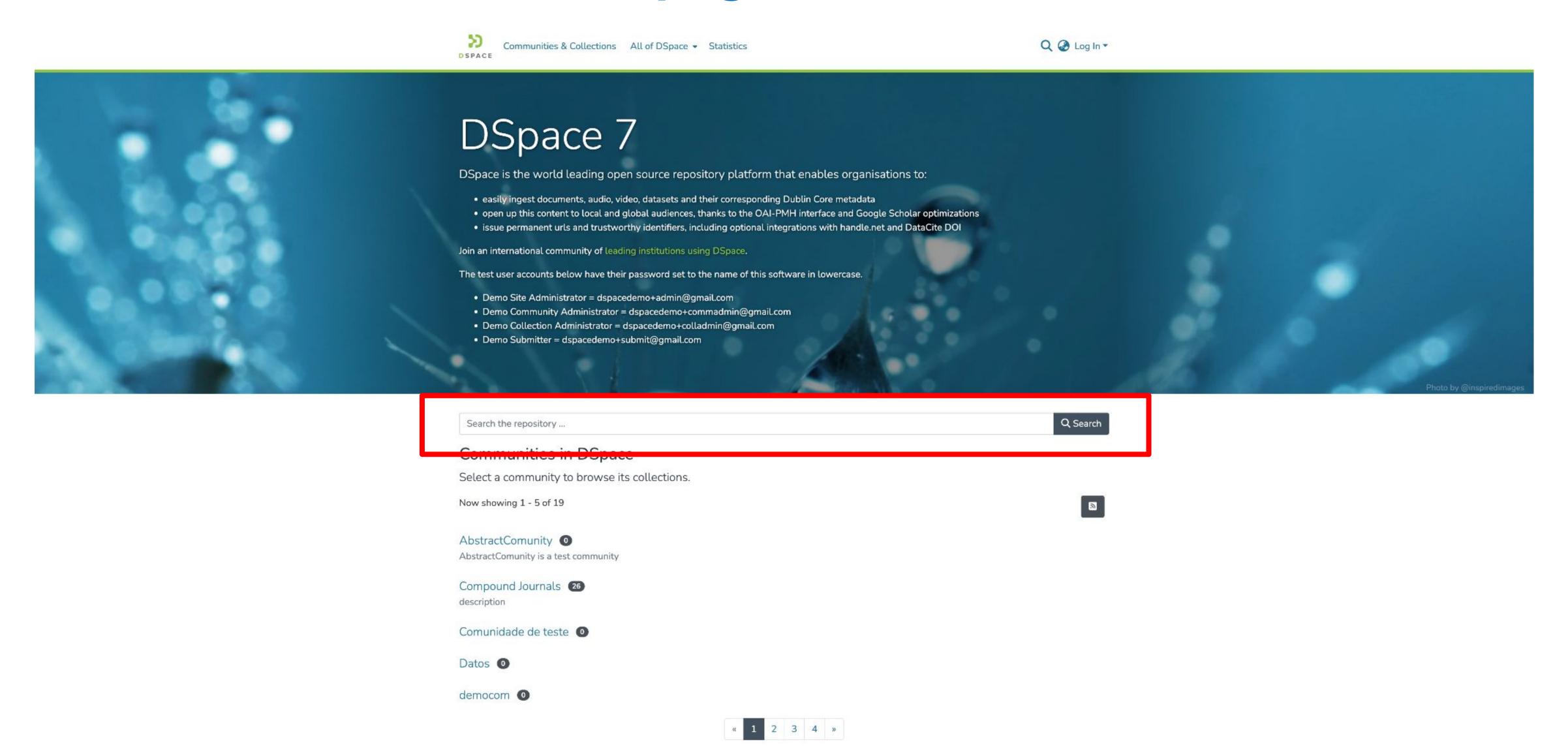
Publications

Permanent URI for this community https://demo7.dspace.org/handle/123456789/1



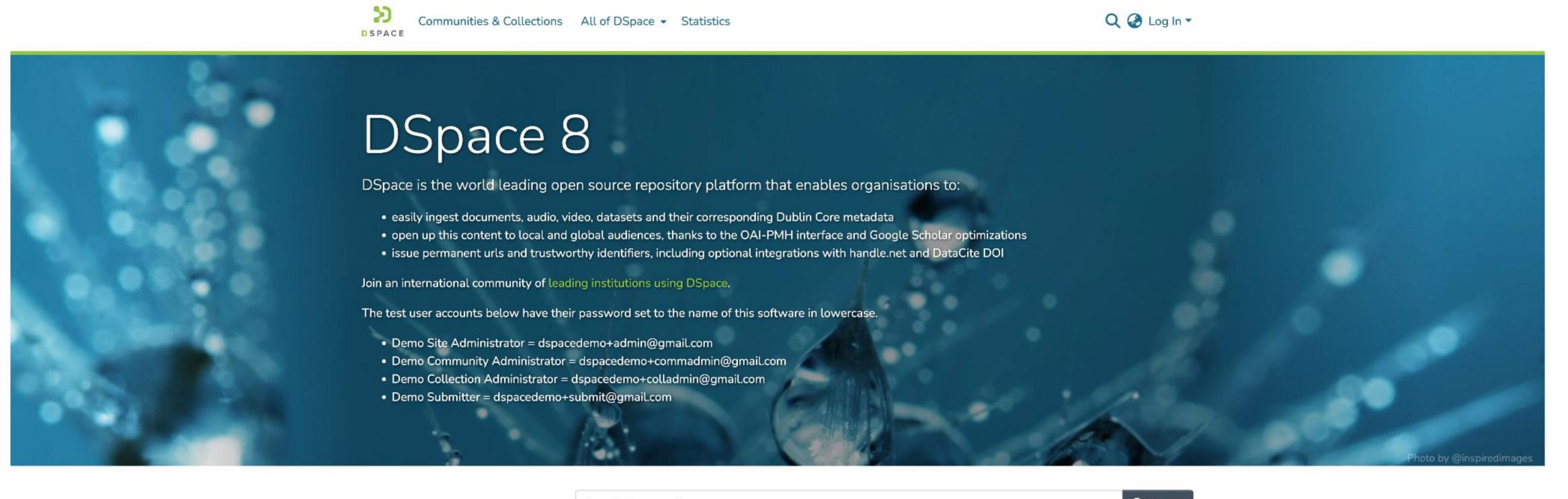


Search Facets on Homepage





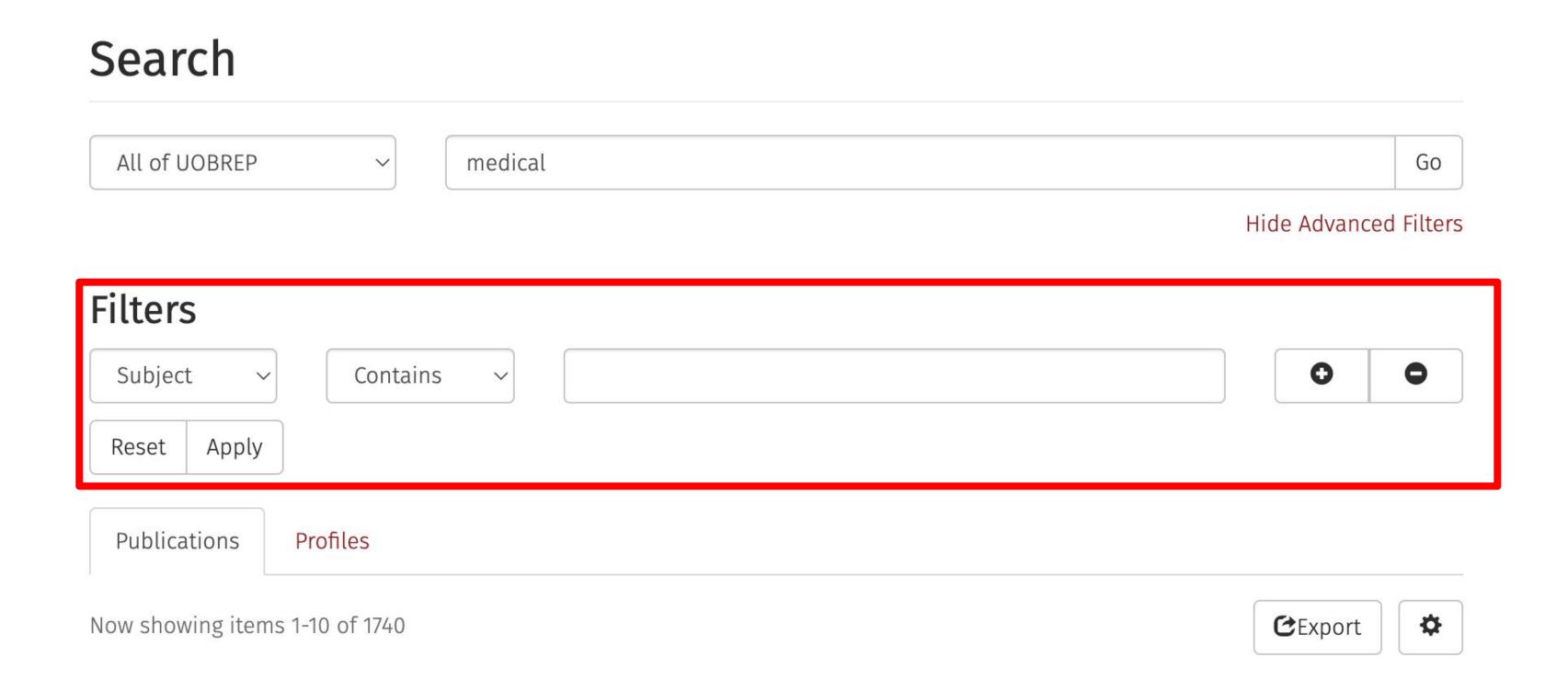
Search Facets on Homepage





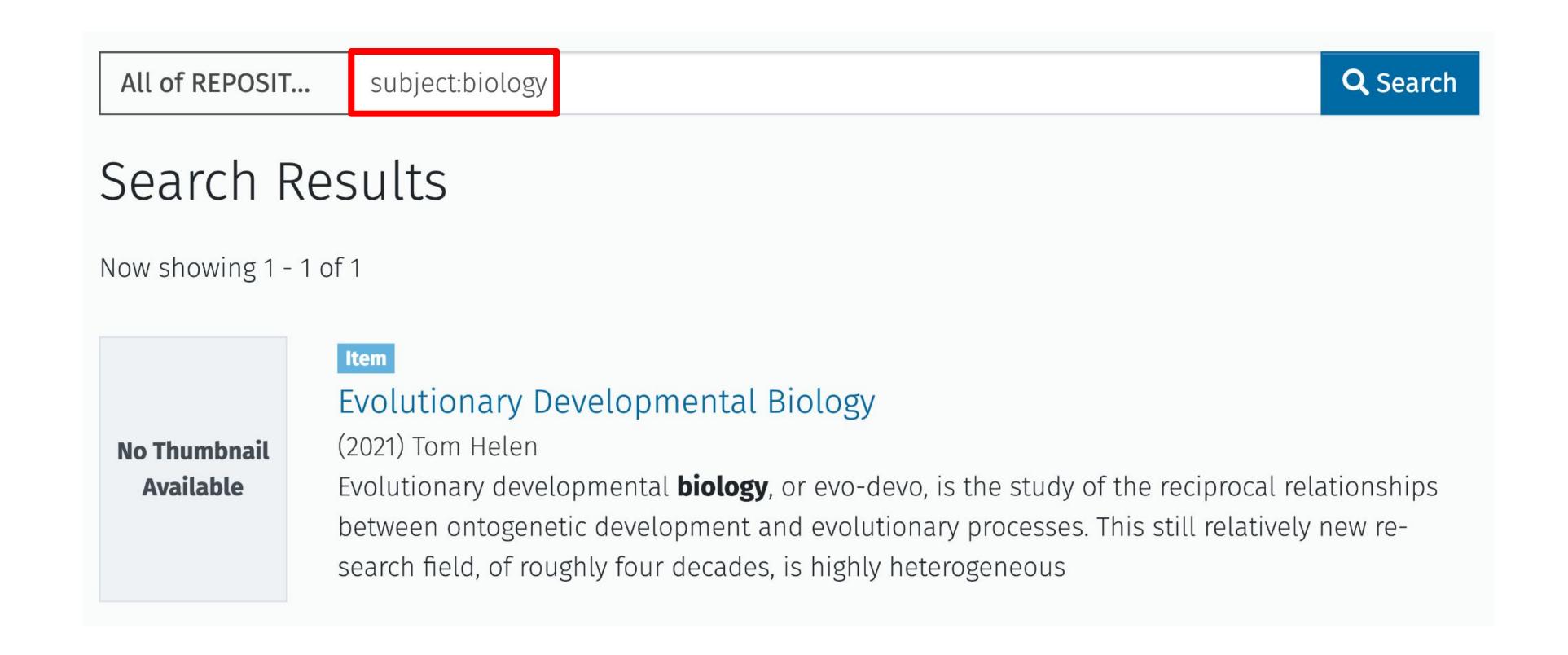


Advanced Search filters



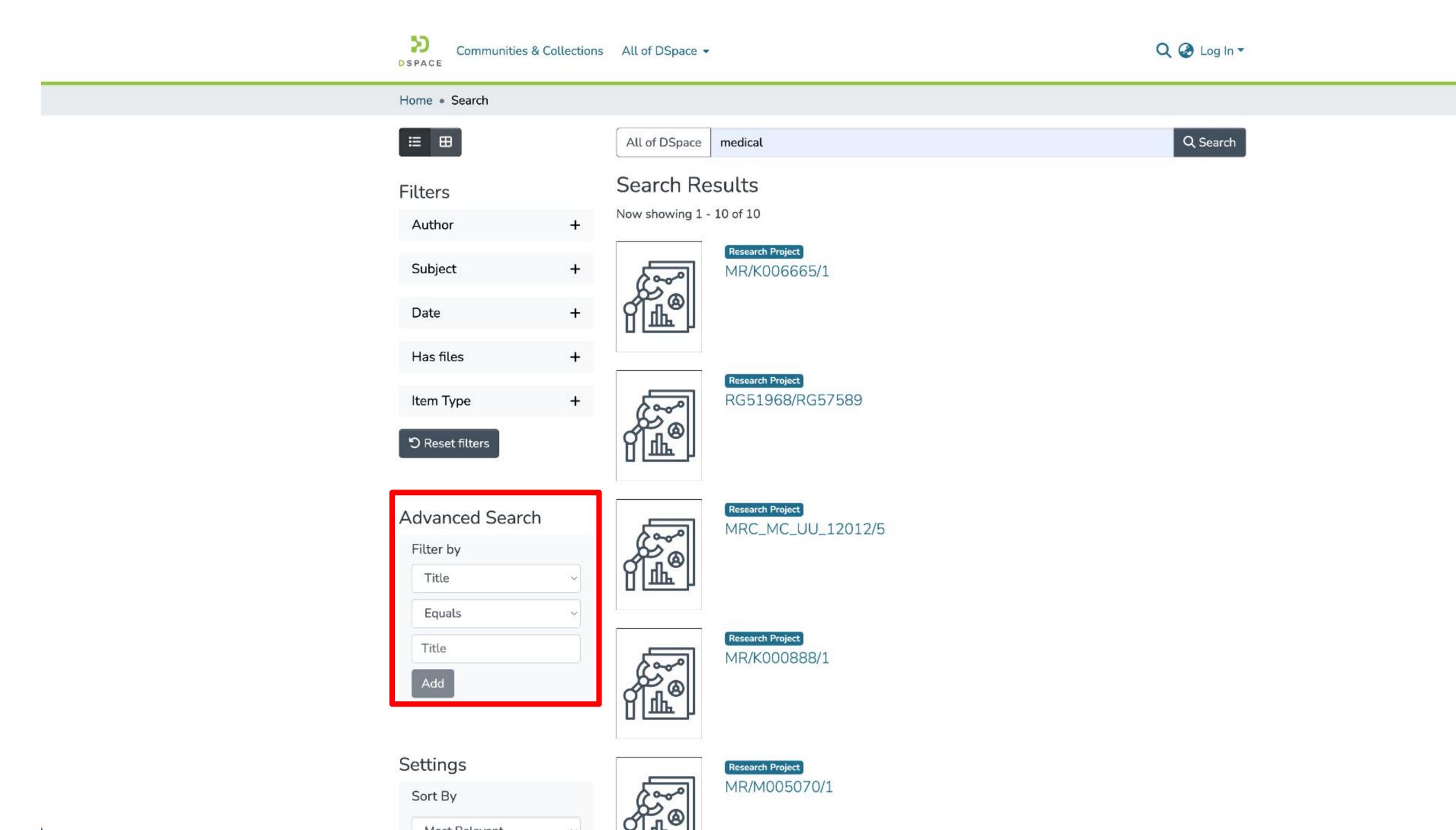


Advanced Search filters





Advanced Search filters





Add relationships via external sources

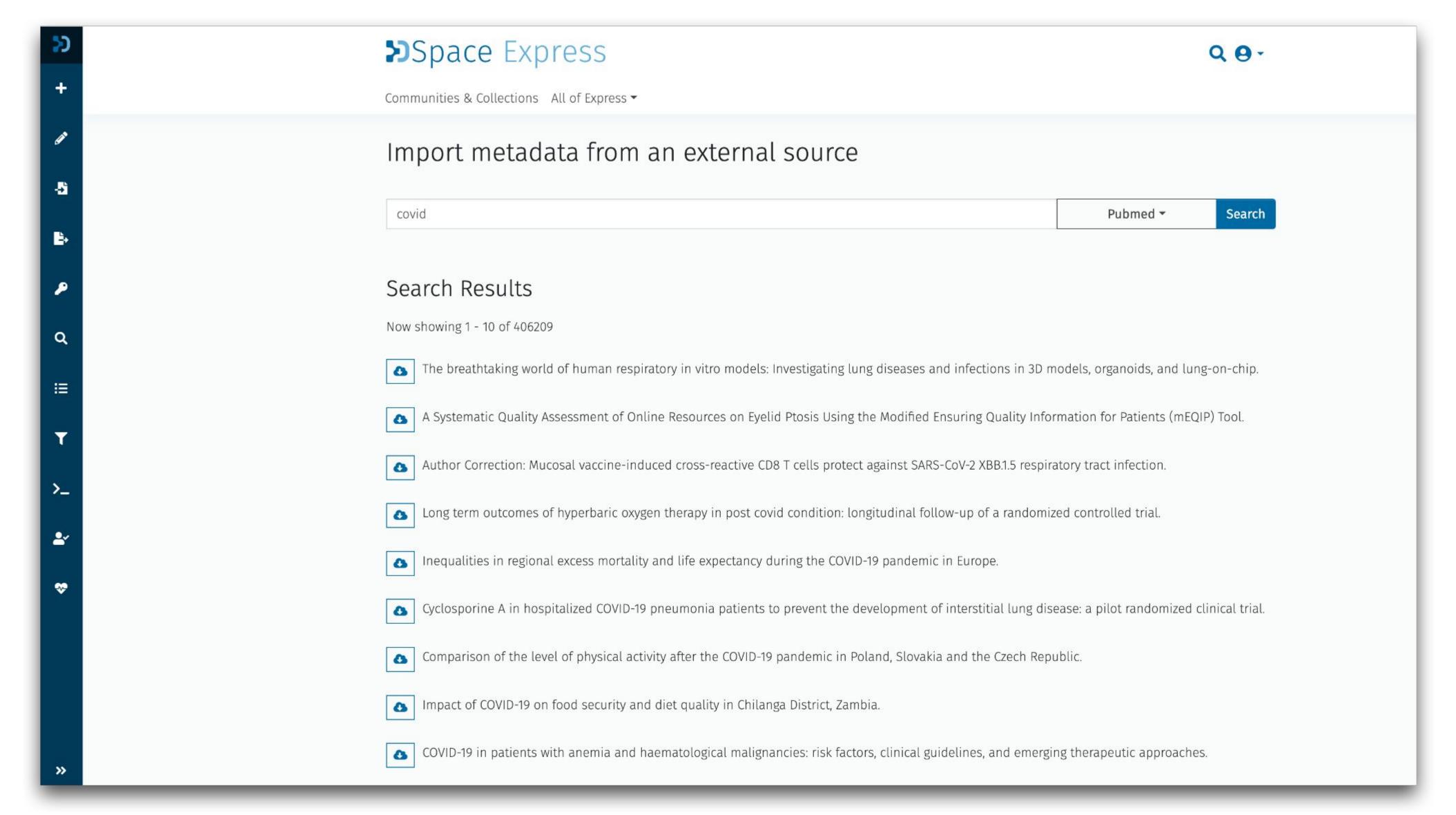
DSpace 7 introduced additional external lookup sources:

- Pubmed
- Scopus
- Crossref
- ...

And extended the ORCiD lookup.



Add relationships via external sources





Add relationships via external sources

DSpace 7 introduced additional external lookup sources:

- Pubmed
- Scopus
- Crossref
- ...

And extended the ORCiD lookup.

- In DSpace 7, this lookup is only available when submitting a new item.
- In DSpace 8, lookup functionality is also available in the item edit section.



Administrator Reports (beta)

DSpace 8 will introduce basic administrator reports. There are two reports available:

- Filtered Collection reports: these reports count the numbers of item per community/collection. Administrators will also have access to a number of filters they can apply to narrow down the result.
- Metadata Query reports: These will provide item counts based on metadata queries to specify what should be counted and what not (and some other available filters).



Administrator Reports (beta)

Collection Filter Report

Filters			
	Show C	Collection	s
	Select all filters		Deselect all filters
Item	Property Filters		
	Is Item - always true		Withdrawn Items
	Available Items - Not Withdrawn		Discoverable Items - Not Private
	Not Discoverable - Private Item		
Basic	Bitstream Filters		
	Item has Multiple Original Bitstreams		Item has No Original Bitstreams
	Item has One Original Bitstream		
Bitstr	ream Filters by MIME Type		
	Item has a Doc Original Bitstream (PDF, Office, Text, HTML, XML, etc)		Item has an Image Original Bitstream
	Has Other Bitstream Types (not Doc or Image)		Item has multiple types of Original Bitstreams (Doc, Image, Other)



DSpace 8 dependencies: keep this in mind

For security purposes, DSpace 8 features upgrades to:

- Angular 17 (and standalone components)
- Jakarta EE (to support Tomcat 10+ and Spring 6+)

When you upgrade to DSpace 8, you should be aware of these changes. They may require you to update custom code/plugins you have in your DSpace. See **Breaking Changes section*** of the Release Notes for more details.



Bug fixes

https://github.com/orgs/DSpace/projects/27/views/2?filterQuery=done+label%3Abug

~	O Done 337		
1	OSpace 7 doesn't support Tomcat 10 or have Jakarta EE Support #8713	tdonohue -	☑ Done
2		tdonohue -	☑ Done
3	Fix for submission describe warning contribution bug #2905	LotteHofstede	☑ Done
4	Remove unnecessary "exit" statements which stop running Postgres container #9492	(a) tdonohue	☑ Done
5	Fix Runnable JAR issues & use it in all Docker images #9505	(a) tdonohue	☑ Done
6	Created abstract component loader class #2339	alexandrevryghem -	☑ Done
7	Search query is not set by default when opening an external sources tab #2376	alexandrevryghem -	☑ Done
8	Fixed MathJax code being displayed twice by dsMarkdown pipe #2397	alexandrevryghem -	☑ Done -
9	Fix setStaleByHrefSubstring not emitting true when all requests are stale #2349	alexandrevryghem	☑ Done
10	Fix minor collection form bugs #2350	alexandrevryghem	☑ Done



Reviewing Bug Fixes and new features

DSpace development is driven by the community. But developing also implies:

- code reviews
- practical testing

This needs to happen for both new functionality as well as for bug fixes. But there are different degrees of overall complexity.

- New functionality: reviews need to be done by someone highly familiar with DSpace's architecture
- Bug fixes: reviews can be done by people who are less familiar with the architecture.

In practice:

- New functionality: consumes most of the available review time from a limited amount of DSpace Developing partners)
- Bug fixes: Less time left for these reviews



Reviewing Bug Fixes and new features

You can help!

Bug fix reviews

- Initial testing: someone, not necessarily super familiar with DSpace's code, tests if the bug fix really fixes the issue
- Code review: Someone familiar with DSpace's codebase reviews the bug fix' code itself

By testing bug fixes, you can help getting more of these fixes into every DSpace release!

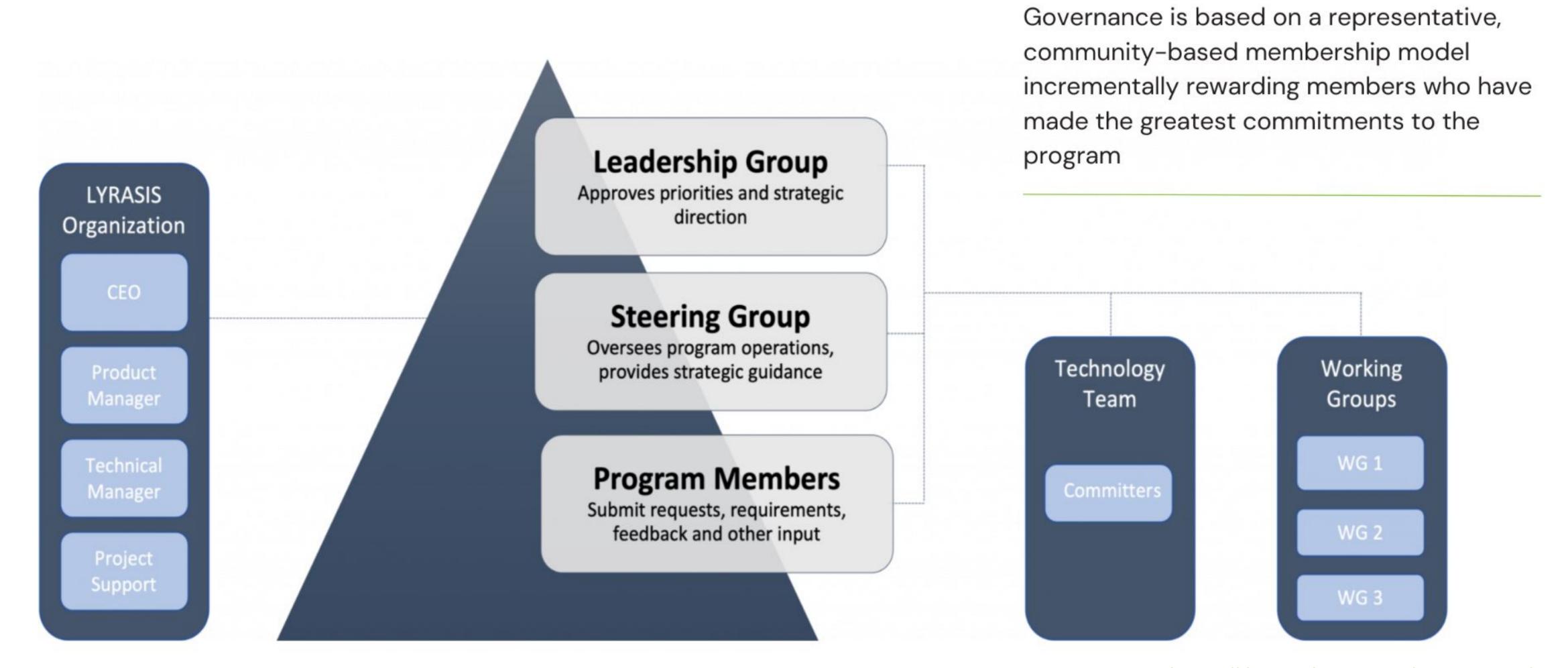


What's next for DSpace?

Events, releases & how you can help



DSpace Program Governance



More at: https://dspace.lyrasis.org/governance/

DSpace Community Advisory Team (DCAT)

DCAT represents the interests of repository managers and administrators across the globe.

- Advises DSpace Steering and Leadership
- Solicits community feedback through community-wide discussions, surveys, and other activities.
- Helps ensure future software releases address the needs of the community.

3)

Open Monthly Meetings

Open Forum each 2nd Tuesday of the month \mathbf{c}

End user documentation

Created end user documentation for DSpace 7



 \mathbf{c}

DSpace 8 Testathon

Conducted community testathon of DSpace 8 release candidate (spring 2024)



UX Testing

Sponsored a UX project team to perform targeted, lightweight user testing, aiming to propose UX improvements to DSpace8+ versions



Future DSpace Releases



DSpace 8.0 Release: Approx. June 17-24

DSpace 7.6.2 Release: shortly after 8.0 (estimated for July/Aug).

Bug/accessibility fixes backported from 8

DSpace 9.0 Release: April 2025

Priorities for 9.0 not yet finalized by Governance

Additional bug-fix releases of 7.6.x and 8.x will be released in 2024, as necessary.



JULY 2024 DSpace 8 Q&A Webinar

Online & free to attend Stay tuned to DSpace mailing list for details

SEPT 23-25

DSpace North America User Group Meeting

University of Minnesota

COMING

Inaugural DSpace India User Group Meeting

Sometime in 2024, Details TBD



The Pursuit of Happiness (= sustainability)



We need to rethink engagement and participation

Open Source projects need the contribution of the whole community, not just a portion of it



How can you help?

- Become a Member of DSpace
- Contribute to the <u>DSpace Development Fund</u>
 - Trusted service providers funded to do development for community
 - Priorities decided by Steering/Leadership
 - Priority for 2023-24 was Enhanced Accessibility
- Contribute code, review or test (<u>Guidelines</u>)
- → Participate in <u>DCAT</u>
- Join (or create) your local DSpace User Group
- → Try out DSpace 8: https://wiki.lyrasis.org/display/DSPACE/Try+out+DSpace+8

THANKS FOR LISTENING