DSpace-CRIS roadmap

The 4Science Team

DSpace-CRIS Workshop

Anwendertreffen 2021

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About 4Science

About us & 4Science

9 active contributors to DSpace

14 active contributors to DSpace-CRIS, including the original creators back in 2009, open sourced in 2013

Contributors to many other related open source projects: Dataverse, OJS, DuraCloud, DBMDZ IIIF Presentation API

Deeply involved in the standards definition and innovative technologies adoption:

COAR Next Generation Repositories, CERIF, OpenAIRE Guidelines,

Signposting, ResourceSync, NotifyProject

What is DSpace-CRIS?

The first open source CRIS system

More than 100 installations Worldwide, in all continents!

A working solution since 2009, open sourced 2013

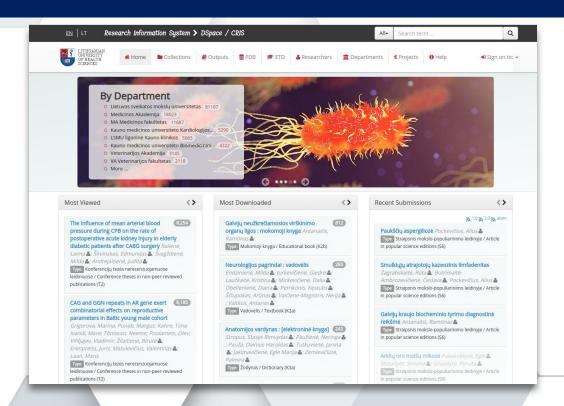**DSpace extended to all Research entities**

People, Organization, Projects, etc.

Institutional Repository

To better support:

Interactions
Reputation
Dissemination

What is DSpace-CRIS?

What is DSpace-CRIS?

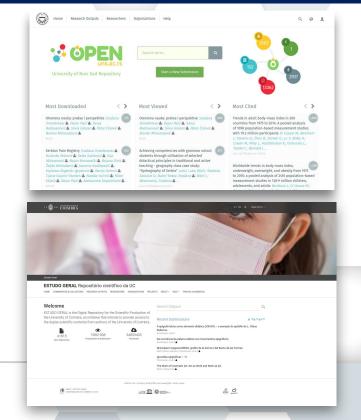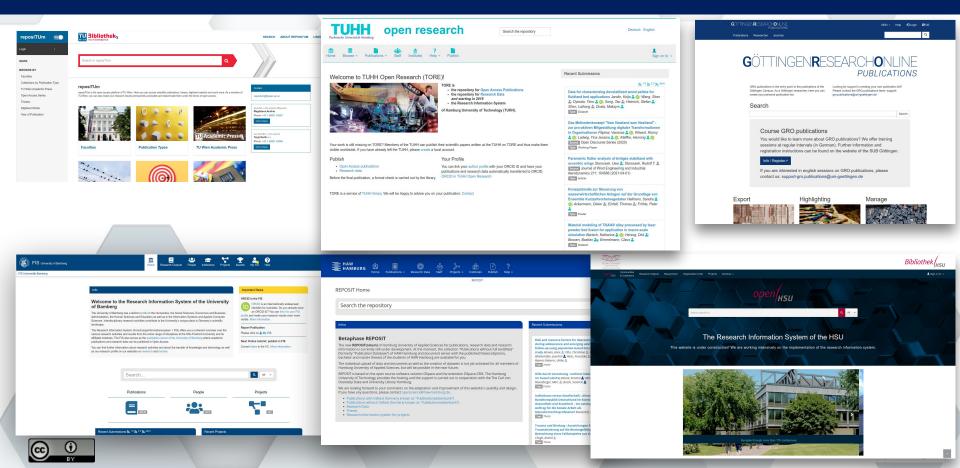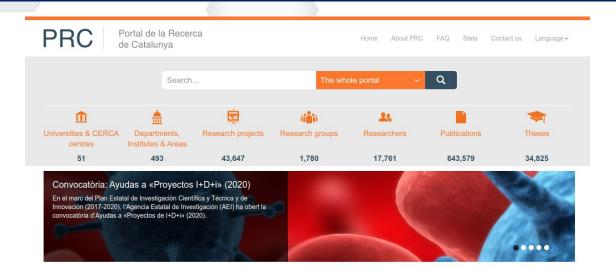# What is DSpace-CRIS?

What is DSpace-CRIS?

Introduction: DSpace-CRIS 7 when and what

DSpace-CRIS 7: Ready to use, out-of-box

Default data model based on OpenAIRE information space and CRIS guidelines

Support for real CRIS workflows and use cases

- Full ORCID integration (pull & push)
- Profile (self)management and curation, CV export
- data quality checks & tools: deduplication, publications claim/unclaim, publication-patent-project lookup
- fine-grain security

Easy to maintain, most frequent administrative tasks can be performed via UI

Modern UX, full REST API backend

DSpace-CRIS 7: Modern, scalable, interoperable
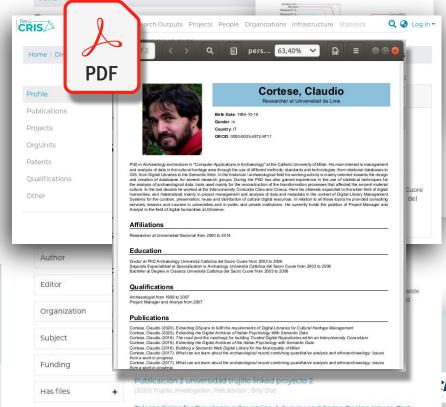
DSpace-CRIS 7 vs DSpace 7

We have rebuilt DSpace-CRIS from the main branch of DSpace

This makes it easier to check the differences and keep the projects aligned

> 2000 additional commits. Approx the commits that were needed to build DSpace 4, 5 and 6 (10-20% more than the DSpace 7 commits)

More automatic tests

- REST 3738 vs 3225 (≅**16% more**)
- Unit Test Angular 3659 vs 3249 (≅**13% more**)

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Public face

- Configurable layout (tabs, boxs, custom field rendering) via REST API and xls file
- Interlinked navigation: inverse relations, links to other entities
- Configurable sections (explore): browses, advanced search, faceting, listing, etc
- Advanced and extensible statistics visualization (with charts, aggregated views, etc.)
- Metrics visualization (Scopus citation, WOS citation, Scopus h-index, Scopus coauthors, … altmetrics, dimensions)
- Granular metadata permissions
- Creation of CVs in PDF format, export of publications in CSL

Public face

Submission and data collection process

- submission process and workflow for all the entities according to the OpenAIRE Guidelines for CRIS Managers
- import from external sources (other than the basic one provided by DSpace7): Scopus, WOS, VuFind, EPO, OpenAIRE, etc.
- Configurable edit options to allow different users to directly edit some information also on archived items
- Ability to create on-the-fly new entities to reference upon approval of the source record
- Ability to preserve identifiers of related objects for future attribution (i.e. ORCID of authors, grantno, etc)
- Advanced import and export capabilities (from/to xls) open to all users according to their permissions

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Submission and data collection process

Complete ORCID integration

- (WebHook)
- (external after 7.0)

Profile

Publications

Projects

Secured Tab

ORCID

Other

ORCID Authorizations

No ORCID iD associated yet

Connect to ORCID ID

Profile

Publications

Projects

Secured Tab

ORCID

Other

Profile

	Preferred name	Demo Site Administrator
	ORCID	0000-0002-8310-6788

ORCID Authorizations

Granted authorizations

- Get your ORCID iD
- Read your information with visibility set to Trusted Parties
- Add/update your research activities
- Add/update other information about you

Missing authorizations

Great! This box is empty, so you have granted all access rights to use all functions offers by your institution.

If you need to remove your ORCID, please contact the repository administrator

ORCID Authorizations

Granted authorizations

- Get your ORCID iD
- Add/update your research activities
- Add/update other information about you

Missing authorizations

The following authorizations are missing:

- Read your information with visibility set to Trusted Parties

If you need to remove your ORCID, please contact the repository administrator

ORCID Synchronization settings

Enable 'Manual' Synchronization mode to disable batch synchronization, so you must send your data to ORCID Registry manually

Synchronization mode

Synchronization mode

Manual

Publication preferences

- ◯ Disabled
- ● All publications
- ◯ Selected publications
- ◯ My publications

Project preferences

- ◯ Disabled
- ◯ All projects
- ● Selected projects
- ◯ My projects

Profile preferences

- ☑ Affiliation
- ☑ Education
- ☐ Bibliographic data
- ☑ Identifiers

Save changes

ORCID Registry Queue

Now showing 1 - 4 of 4

	Name	
📖	The psychology of human thought	Send · Delete
👤	Demo Site Administrator	Send · Delete

☐ **The Pythagorean theorem**

journal-article

HANDLE: http://localhost:4000/handle/123456789/717

DOI: 10.1016/j.procs.2014.06.008

Source: DSpaceCris7   ★ Preferred source

Data quality

- OpenAIRE integration with the Notification Broker
- Publications suggestion from OpenAIRE and ORCID
- Automatic import from Scopus and WOS
- Flow to request correction on existing item (≠ versioning)
- Duplicate detection
- Advanced import and export capabilities (from/to xls) / DBMS Framework

OpenAIRE Broker

Below you can see all the topics received from the subscriptions to OpenAIRE.

Current Topics

Now showing 1 - 6 of 6

Topic	Last Event	Actions
ENRICH/MORE/PID	2020/10/09 10:11 UTC	33 i
ENRICH/MISSING/ABSTRACT	2020/10/08 16:14 UTC	71 i
ENRICH/MISSING/SUBJECT/ACM	2020/09/21 17:51 UTC	18 i
ENRICH/MISSING/PID	2020/10/01 07:36 UTC	4 i
ENRICH/MISSING/PROJECT	2020/09/17 10:28 UTC	6 i

« **1** »

OpenAIRE Broker Suggestions

Below the list of all the suggestions, received from OpenAIRE, for the selected topic.

« Back to topics

Topic: ENRICH/MISSING/ABSTRACT

Now showing 1 - 1 of 1

Publication	Details	Actions
Missing abstract article	Abstract: Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nulla scelerisque vestibulum tellus sed lacinia. Aenean vitae sapien a quam congue ultrices. Sed vehicula sollicitudin ligula, vitae lacinia velit. Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nulla scelerisque vestibulum tellus sed lacinia. Aenean vitae sapien a quam congue ultrices. Sed vehicula sollicitudin ligula, vitae lacinia velit. ▲ Show less	✔ Accept suggestion 🗑 Ignore suggestion 🗑 Reject suggestion

« 1 »

« Back to topics

Code: 687567
Funder: EC
Funding program: H2020
Jurisdiction: EU

Bound to the local record: 10713/29832 🔍 🗑

Egypt, crossroad of translations and literary interweavings (3rd-6th centuries). A reconsideration of earlier Coptic literature

OpenAIRE Suggested Project data

Project title:
Tracking Papyrus and Parchment Paths: An Archaeological Atlas of Coptic Literature. Literary Texts in their Geographical Context: Production, Copying, Usage, Dissemination and Storage

Acronym: PAThs
Code: 687567
Funder: EC
Funding program: H2020
Jurisdiction: EU

No local record found 🔍

✔ Import project and accept suggestion

🗑 Ignore suggestion

🗑 Reject suggestion

« »

« Back to topics

Choose a project to bound

Publication:

Egypt, crossroad of translations and literary interweavings (3rd-6th centuries). A reconsideration of earlier ...

Project search

test

Clear   Search

Now showing 1 - 3 of 3

○ **Research Project**
Test project

● **Research Project**
This is a test project

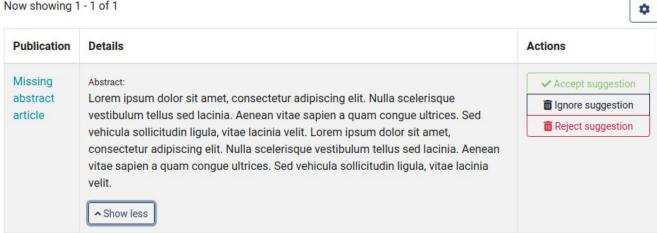○ **Research Project**
Test project

Cancel   Bound project

OpenAIRE Broker Suggestions

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« Back to topics

Topic: ENRICH/MISSING/PROJECT

⚙

Publication	Project details	Actions
Egypt, crossroad of translations and literary interweavings (3rd-6th centuries). A reconsideration of earlier Coptic literature	**OpenAIRE Suggested Project data** Project title: Tracking Papyrus and Parchment Paths: An Archaeological Atlas of Coptic Literature. Literary Texts in their Geographical Context: Production, Copying, Usage, Dissemination and Storage Acronym: PAThs Code: 687567 Funder: EC Funding program: H2020 Jurisdiction: EU Bound to the local record: 10713/29832 🔍 🗑	✓ Import project and accept suggestion 🗑 Ignore suggestion 🗑 Reject suggestion
Egypt, crossroad of translations and	OpenAIRE Suggested Project data	✓ Import project and

Communities & Collections **Research Outputs** **Projects** **People** **Organizations** **Infrastructure**

We found **33 publications** in the OpenAIRE Graph that seems to be related to your profile. Please *review the suggestions.*

Drag & Drop your files here , or **browse**

Show

Filters

Status ▬

☐ Workspace `85`
☐ Archived `84`
☐ Workflow `1`

Status

Type ✚

Date ✚

↺ Reset filters

All repository

Search in mydspace...

🔍 Search

⮕ Bulk Export

Now showing 1 - 10 of 170

`Archived`

`Organizational Unit`

4Science

(No Date)

4Science was established in 2015 to support universities, research and cultural institutes all around the world

ⓘ View

`Archived`

`Publication`

DSpace administration issues: the community admin patch

(2005) Donohue, Tim Bollini, Andrea

A large or medium repository, but also a small repository in some special cases, needs to allow a *more*

ⓘ View
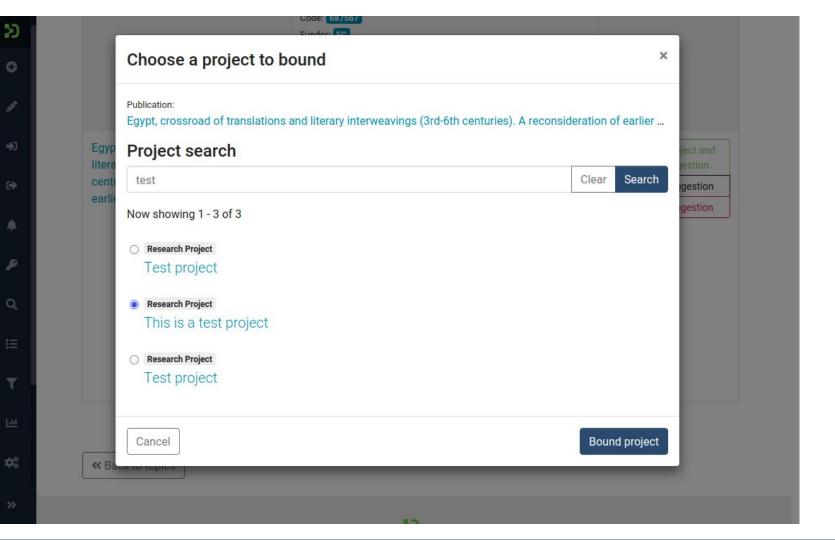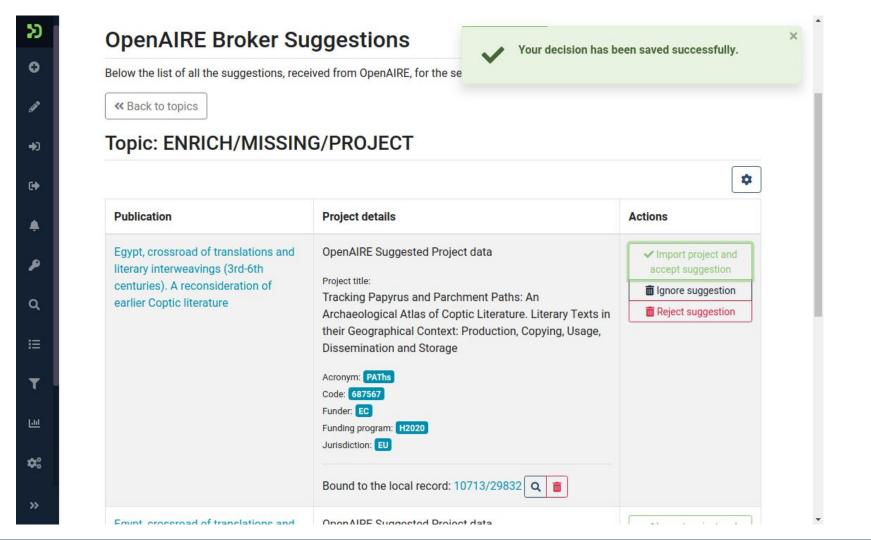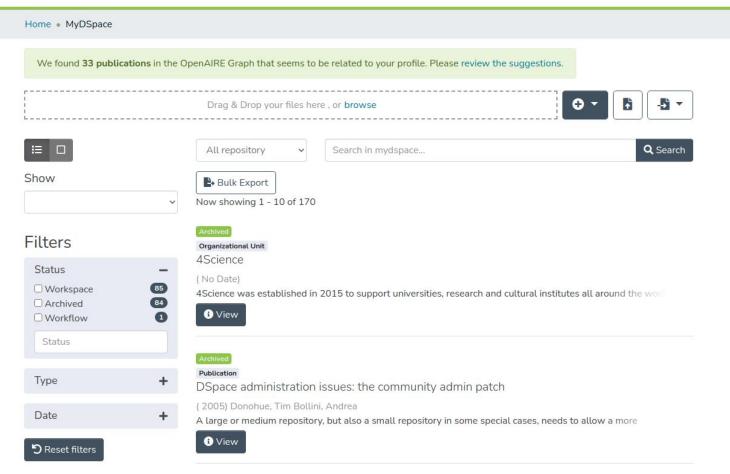
Suggestion for Bollini, Andrea from the OpenAIRE Graph

Select / Deselect All (0)

Now showing 1 - 10 of 33

Adoption of NGR technologies - status update

(2019-11-26) Bollini, Andrea ; Nielsen, Lars Holm ; Tripp, Erin ; Walk, Paul ; Shearer, Kathleen ; Rodrigue
In November 2017, COAR published the report, Behaviours and Technical Recommendations of the COAR Next
Generation Repositories Working Group. The report published a list of 19 technologies and protocols that are
recommended to improve the way repositories function. There is tremendous interest in the community re

Total Score
110.00

✔ Approve & import ▾   🚫 Not mine   👁 See evidence

DSpace 7 - Creating High-Quality Software: Update to Development Practices

(2019-11-26) Bollini, Andrea ; Digilio, Giuseppe ; Donohue, Tim ; Brady, Terry
The community development processes are a key aspect of any open source software. DSpace has a history of
more than 15-years of successful open development collaboration. Over the years technologies, processes, and
practices have constantly been updated and improved to facilitate the collaboration and raise the quality

Total Score
110.00

✔ Approve & import ▾   🚫 Not mine   👁 See evidence

DSpace 7 - Enhanced Submission & Workflow

(2019-11-26) Digilio, Giuseppe ; Cortese, Claudio ; Bollini, Andrea
The last two years have been very intense for the DSpace community. A great effort has been put into finalizing
the development of a DSpace release, 7.0, which has many changes from previous releases, particularly with
regard to UI technology. As part of the activities related to the creation of DSpace 7, particularly innovativ

Total Score
110.00

✔ Approve & import ▾   🚫 Not mine   👁 See evidence

Suggestion for Bollini, Andrea from the OpenAIRE Graph

Select / Deselect All **(0)**

Now showing 1 - 10 of 33

Adoption of NGR technologies - status update

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Total Score

110.00

✔ Approve & import ▾   🚫 Not mine   👁 Hide evidence

Score	Type	Notes
100.00	AuthorNamesScorer	The author Bollini, Andrea at position 1 in the authors list matches the name Bollini, Andrea in the researcher profile
10.00	DateScorer	The publication date is within the expected range [2015, 2065]

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Total Score

110.00

✔ Approve & import ▾   🚫 Not mine   👁 See evidence

Migration procedures from DSpace-CRIS 5

- We have reset the database migration, so DSpace-CRIS 7 will start from the DSpace 7 database
- basic migration procedures from DSpace-CRIS **5 to version 7** (thanks to the support of the Hamburg University of Technology)
    - DSpace Items
    - CRIS Objects with all the metadata and files. Automatic mapping of default entities and metadata to the default updated configuration. Possibility to configure a custom mapping and deal with custom entities
    - ORCID settings and synchonization history
    - Relation preferences (hidden, selected lists)
    - Statistics data
    - Email subscriptions (maybe not for 7.0)
- Data migration not yet planned for these features
    - CRIS Metrics
    - DBMS Framework
    - Deduplication decisions
    - Migration from version 6
- Search / Browse / Layout / Data model configuration to be redone manually

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"The report of my death was an exaggeration."

-- *Mark Twain*

2nd June ~~1897~~

2021

https://books.google.it/books?id=dOD7iIN1R38C&pg=PA317&redir_esc=y#v=onepage&q&f=false

Next releases of DSpace-CRIS

We will change the version schema for DSpace-CRIS, DSpace-CRIS 7 will be tagged as DSpace-CRIS 2021.01.00 according to the schema **year.major.minor**

Only the latest release will be officially supported, minor release will be used only if urgent fixes (i.e. build failures, major features broken, security issues) are required and the next major release is not stable enough to be immediately released. Minor release will NOT make any API changes to existing endpoints

The next releases will follow in 1-4 months, earlier if urgent fixes are required

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Next releases of DSpace-CRIS

2021.01

- What we have already demonstrated/discussed +
- Visibility at single value level (to hide specific email address, affiliation, etc)
- Relation management (hided, selected lists)
- OpenAIRE compliancy CRIS, Literature v4, DataArchive

2021.02

- Support for the viewer framework (CKAN, IIIF, A/V, DocViewer addons)
- Merge tools
- Double mode for Authority lookup (local & extended)*
- Publication claim / add existing objects to a relation (publications to a project, dataset to an equipment, etc.)

Next releases of DSpace-CRIS

T.B.D.

- Network visualization
- UnPaywall
- Redirect URL via identifiers
- Multilingual support for values
- Additional statistics (Content, workflow, administrative)
- Hierarchical visualization
- Core recommender
- OpenAIRE statistics *
- Microformats
- OpenAIRE Project authority
- VIAF authority
- Getty vocabularies
- Sherpa/RoMEO *
- Signposting *
- ResourceSync *
- NotifyProject *

Thank you for your attention!

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