DSpace-CRIS roadmap

The 4Science Team

DSpace-CRIS Workshop
Anwendertreffen 2021
About us & 4Science

9 active contributors to DSpace

14 active contributors to DSpace-CRIS, including the original creators back in 2009, open source 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
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
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)
Public face

- Configurable layout (tabs, boxes, 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
Submission and data collection process
Complete ORCID integration

- Manage sync preferences
- Link ORCID Account
- Login via ORCID
- Synchronization queue
- Push publications
- Push projects
- Push biography data
- Discover new publications (WebHook)
- Discover revoked authz
- Pull biography
- Lookup registry
- Import publications
- Use ORCID API v3
- Search publication in external providers
- NEW - import projects (maybe after 7.0)
- Search ORCID
No ORCID ID associated yet

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

**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
- Identifiers

[Save changes]
<table>
<thead>
<tr>
<th>Name</th>
<th>Send</th>
<th>Delete</th>
</tr>
</thead>
<tbody>
<tr>
<td>The psychology of human thought</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Demo Site Administrator</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **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

<table>
<thead>
<tr>
<th>Topic</th>
<th>Last Event</th>
<th>Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENRICHE/MORE/PID</td>
<td>2020/10/09 10:11 UTC</td>
<td>33 i</td>
</tr>
<tr>
<td>ENRICHE/MISSING/ABSTRACT</td>
<td>2020/10/08 16:14 UTC</td>
<td>71 i</td>
</tr>
<tr>
<td>ENRICHE/MISSING/SUBJECT/ACM</td>
<td>2020/09/21 17:51 UTC</td>
<td>18 i</td>
</tr>
<tr>
<td>ENRICHE/MISSING/PID</td>
<td>2020/10/01 07:36 UTC</td>
<td>4 i</td>
</tr>
<tr>
<td>ENRICHE/MISSING/PROJECT</td>
<td>2020/09/17 10:28 UTC</td>
<td>6 i</td>
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</tbody>
</table>
OpenAIRE Broker Suggestions

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

Topic: ENRICH/MISSING/ABSTRACT

Now showing 1 - 1 of 1

<table>
<thead>
<tr>
<th>Publication</th>
<th>Details</th>
<th>Actions</th>
</tr>
</thead>
</table>
| Missing abstract article | Abstract:

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

OpenAIRE Suggested Project data

Project title:

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

No local record found
Choose a project to bound

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

Project search

Clear Search

test

Now showing 1 - 3 of 3

- Research Project
  - Test project

- Research Project
  - This is a test project

- Research Project
  - Test project

Bound project

Cancel
### OpenAIRE Broker Suggestions

Below the list of all the suggestions, received from OpenAIRE, for the section "ENRICH/MISSING/PROJECT".

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

#### Project details
- **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

#### Actions
- **Import project and accept suggestion**
- **Ignore suggestion**
- **Reject suggestion**
We found 33 publications in the OpenAIRE Graph that seems to be related to your profile. Please review the suggestions.

Search in mydspace... Search

Show

All repository

Now showing 1 - 10 of 170

Filters

Status

- Workspace
- Archived
- Workflow

Organization Unit

4Science

( No Date)

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

Type

- Publication

Date

- 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
Suggestion for Bollini, Andrea from the OpenAIRE Graph

Adoption of NGR technologies - status update
(2019-11-26) Bollini, Andrea; Nielsen, Lars Holm; Tripp, Erin; Walk, Paul; Shearer, Kathleen; Rodríguez
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.

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.

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...
Suggestion for Bollini, Andrea from the OpenAIRE Graph

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<th>Notes</th>
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<tr>
<td>100.00</td>
<td>AuthorNamesScorer</td>
<td>The author Bollini, Andrea at position 1 in the authors list matches the name Bollini, Andrea in the researcher profile</td>
</tr>
<tr>
<td>10.00</td>
<td>DateScorer</td>
<td>The publication date is within the expected range [2015, 2065]</td>
</tr>
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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 synchronization 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
“The report of my death was an exaggeration.”

-- Mark Twain

2nd June 1897

2021
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
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!

Susanna Mornati, 4Science
susanna.mornati@4science.it
https://orcid.org/0000-0001-9931-3637

Andrea Bollini, 4Science
andrea.bollini@4science.it
https://orcid.org/0000-0002-9029-1854