

DSpace-CRIS: the free open-source Research Information Management System

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www.4science.it

DSpace-CRIS

DSpace-CRIS is an “**extended**” version of DSpace, the most adopted repository platform in the world.

It has a powerful and flexible **data model** to describe not just publications, but **all the entities** that populate the research environment and their meaningful **relationships**.

<https://wiki.duraspace.org/display/DSPACECRIS/DSpace-CRIS+Home>
(documentation)

<https://dspace-cris.4science.it/> (demo)

Open solution for research information management

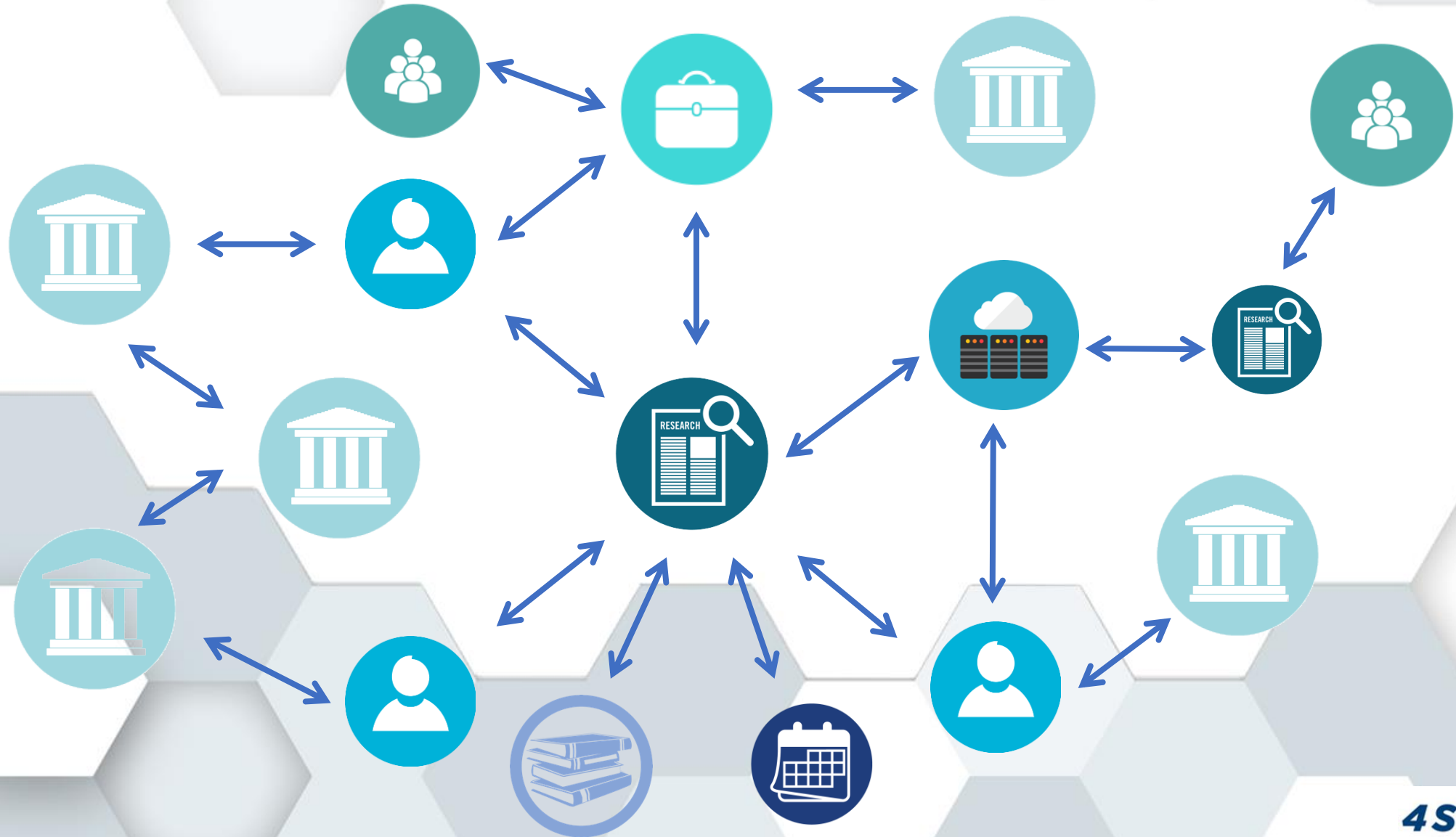
DSpace-CRIS is **free, open source**, compliant with **open standards, open protocols, open technologies**.

It provides institutions with a **sustainable and effective** tool to **manage research information** such as: researchers' profiles, department pages, project grants & awards, research outputs, patents, theses, metrics, reports, statistics, etc.

Now adopted in 6 continents:

<https://wiki.duraspace.org/display/DSPACECRIS/DSpace-CRIS+Users>

An integrated view of the research ecosystem



Advanced user interface

- State-of-art technology for your UI (next: version 7 with Angular UI)
- Adaptive, responsive
- Icons for intuitive exploration
- Widgets for most viewed, most cited, etc.

The screenshot displays the Ktisis website interface. At the top, there are logos for 'KTISIS' (ΚΤΙΣΙΣ) and 'Τεχνολογικό Πανεπιστήμιο Κύπρου' (Cyprus University of Technology). Below the logos is a navigation menu with items: Home, Communities & Collections, Research Outputs, Researchers, Faculty & Departments, Theses, Patents, Projects, Help, and a Language selector. A 'Sign on to:' button is visible in the top right corner.

The main content area features a 'Welcome to Ktisis' section with a descriptive paragraph. To the right, there are two prominent banners: 'THE WORLD UNIVERSITY RANKINGS' and 'THE YOUNGEST AMONG THE TOP EUROPEAN UNIVERSITIES'. Below these is a search bar with the text 'Search term...' and a search icon. Underneath the search bar are three main categories: 'People' (with 327 items), 'Faculty & Departments' (with 22 items), and 'Publications, books, articles...' (with 2544 items). Each category has an icon and a button to 'Explore'. At the bottom, there are three widgets: 'Recent Submissions', 'Most Viewed' (with 1,838 items), and 'Most Cited' (with 1,948 items). Each widget shows a list of items with their titles and associated icons.

Researcher's profiles

The University of Hong Kong
The HKU Scholars Hub 香港大學學術庫

Home Publications Researchers Organizations Grants Datasets Theses Patents Community Service

Chan, DTM

Collaborations Bibliometrics Email Alert (for New Additions) RSS (for New Additions)

Profile

- Contact Information
 - Biography
 - Honours, Awards & Prizes
 - Professional Societies
- Publications [Export](#)
 - Selected Publications (9)
 - Articles (390)
 - Conference Papers (223)
 - Books Edited (2)
 - Book Chapters (15)
 - Others (3)
- External Relations
 - Knowledge Exchange Activities
 - Invited Lectures & Keynote Speeches
 - Editorship
 - Community Service
- Patents
 - Patents (3)

Contact Information

 **Professor Chan, Daniel Tak Mao 陳德茂**

Title: Chair Professor and Chief of Nephrology
Yu Chiu-Kwong Professorship in Medicine; and Professor:
Chair of Medicine
Professor (Clinical)
Yu Chiu-Kwong Professorship in Medicine
Professor: Chair of Medicine

Department: Department of Medicine
Faculty: Li Ka Shing Faculty of Medicine

Research Interests: (click to check for cognate researchers)

- Treatment and immuno-pathogenesis of lupus nephritis
- Management of viral hepatitis in immunosuppressed patients with kidney diseases

My URLs:

- Personal Page
- <http://orcid.org/0000-0002-3495-4051>

Also Cited As: Chan, TM
Chan, Tak-mao, Daniel




Tel: 2255 4041
Office: QMH PB408

Research outputs with metrics

Ktisis at Cyprus University of Technology / Cyprus University of Technology Repository / Άρθρα/Articles

Please use this identifier to cite or link to this item: <http://ktisis.cut.ac.cy/handle/10488/7613>

Title: A strong regioregularity effect in self-organizing conjugated polymer films and high-efficiency polythiophene: fullerene solar cells

Authors: Choulis, Stelios A. 
Kim, Youngkyoo 
Cook, Steffan 

Keywords: Polymers
Fullerenes
Nanostructured materials
Plastic films
Solar cells

Issue Date: 2008

Publisher: Nature


Source: Nature materials, 2008, Volume 5, Issue 3, Pages 197-203


Abstract: The influence of polymer regioregularity (RR) on the molecular nanostructure, and on the resulting material properties and device performance was analyzed. Annealed blend films show increased α regardless of RR, that indicates improved charge-carrier diffusion. It was found that the highest device efficiencies will be achieved with the highest RR P3HT. It was also found that the dark-current density of as-fabricated devices made with pristine P3HT increases with the RR of P3HT in the higher voltage regime


URI: <http://ktisis.cut.ac.cy/handle/10488/7613>


ISSN: 1476-1122 (print)
1476-4000 (online)


DOI: 10.1038/nmat1574

SCOPUS[™] Citations 1
1,805 
checked on Apr 8, 2017

WEB OF SCIENCE[™] Citations 1
1,759 
checked on May 11, 2017

Page view(s) 1
234 
Last Week 11 Last month 50
checked on Jun 12, 2017

Google Scholar[™] Check 

Altmetric 

Aggregated metrics by item, researcher, dept.

Ktisis at Cyprus University of Technology

Kalogirou, Soteris A.

[Network Lab](#) [View Statistics](#) [Email Alert](#) [RSS Feed](#) [Claim profile](#)

[Profile](#) **[Bibliometrics](#)** [Publications](#) [Projects](#)

Bibliometrics

<p>Total Citations SCOPUS™</p> <p>7,072</p> <p>checked on Jun 13, 2017</p>	<p>Works indexed in SCOPUS™</p> <p>89</p> <p>checked on Jun 13, 2017</p>
<p>Total Citations WEB OF SCIENCE™</p> <p>6,455</p> <p>checked on Jun 13, 2017</p>	<p>Works indexed in WEB OF SCIENCE™</p> <p>113</p> <p>checked on Jun 13, 2017</p>

4SCIENCE
Share your knowledge

Collaboration networks

Researcher << +



Kalogiros, Soteris A.
Department: Department of Mechanical Engineering and Materials Science and Engineering

AND

Cognate Researcher

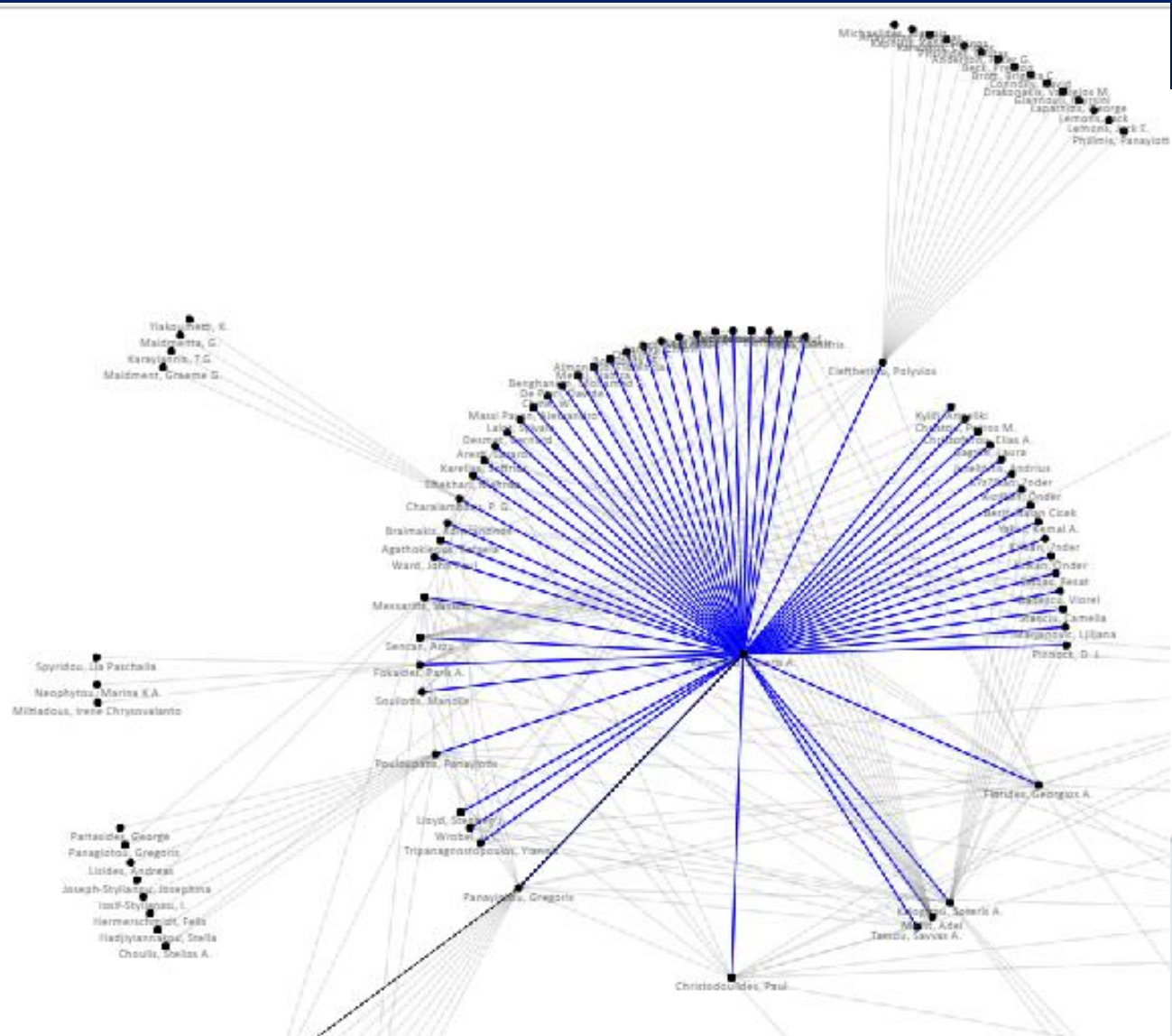


Panayiotou, Gregoris
Department: Department of Mechanical Engineering and Materials Science and Engineering

SHARE

Research Facets

- Co-authored publications: 11



Cyprus University of Technology

Geo-localized usage statistics

Researcher Profile Statistics: Kalogirou, Soteris A.

From: ever To: now Change date range

View Count Download Count Item View Count Item Download Count

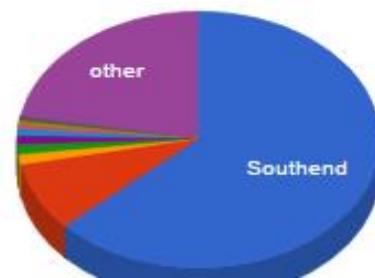
RSS Feed Email Alert

Geo Map



Region Country City Time

Save as a PNG Save as a JPEG



- Southend
- Nicosia
- Moscow
- Shanghai
- Mountain View
- Ashburn
- Limassol
- Los Angeles
- Athens

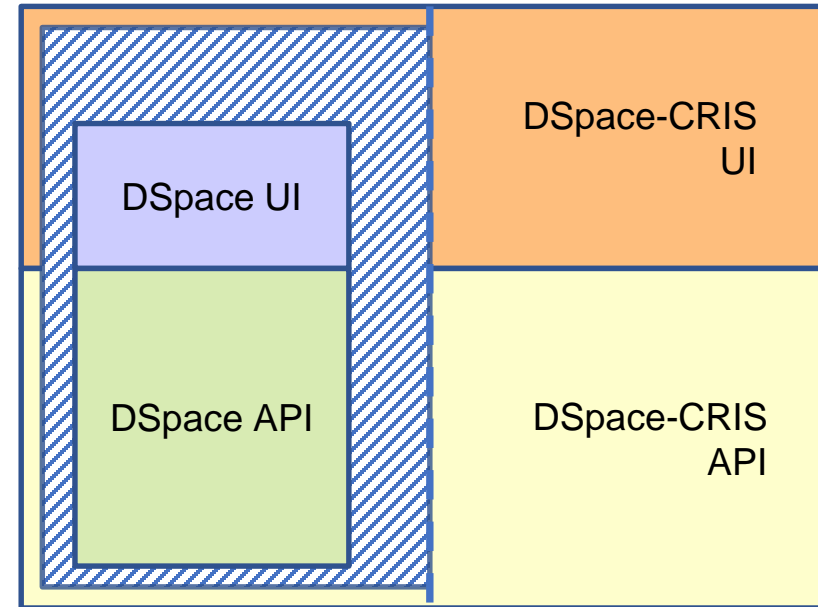
Interoperability & Persistent Identifiers

- Bibliographic/bibliometric import from ORCID, CrossRef, ArXiv, PubMed, Scopus™, WebOfScience™, ADS, custom spreadsheets
- Integration with local IDM for authentication&authorization, HR system for researchers/organizational units info, hidden proprietary CRIS
- Export to data warehouse, to enable combined analytics with other institutional information
- OAI-PMH export to OpenAIRE and other specialized aggregators
- SEO (Search Engine Optimization)
- Support for PIDs for any entity (researchers, publications, journals, projects, funders, etc.)

New features of DSpace-CRIS - 2018

- ORCID API v.2 (push/pull of profiles, publications, projects)
- Core Recommender / Signposting / ResourceSync (funded by OpenAIRE)
- Artificial intelligence feature: automatic population of metadata from PDF articles
- Claim of imported or existing publications
- Integration with OpenAIRE projects database
- Support for next OpenAIRE Guidelines for Data Archives (Datacite 4.1) (funded by OpenAIRE)

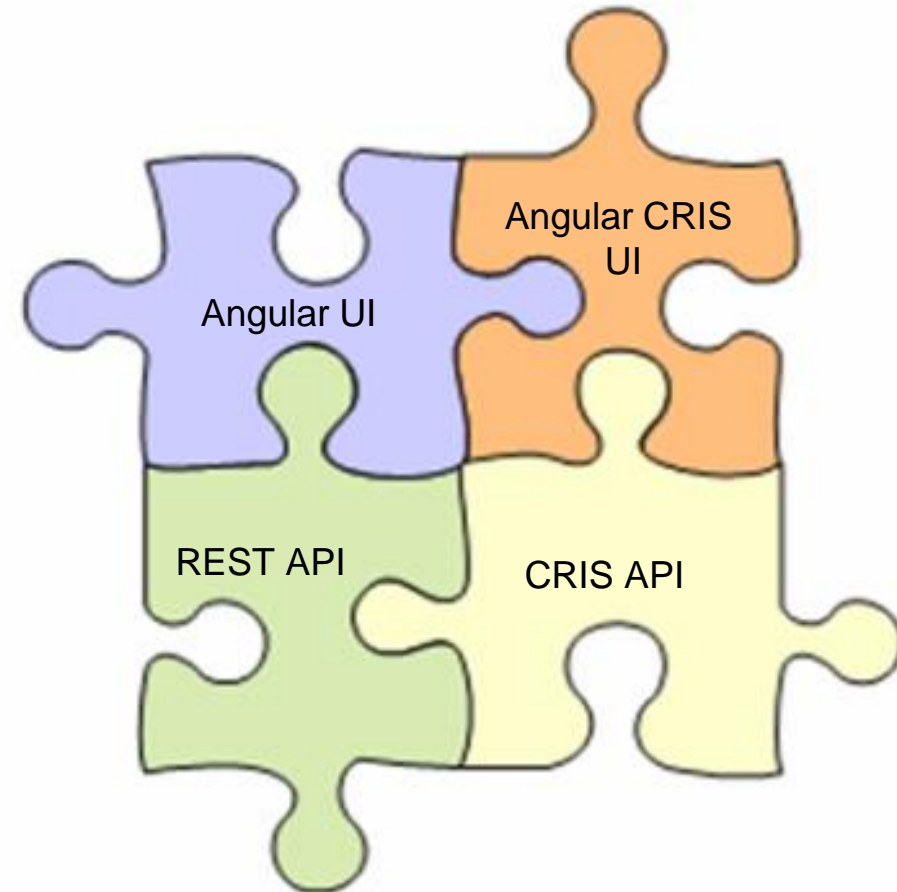
DSpace-CRIS: current architecture



Existing gap of functionalities implemented in DSpace-CRIS but useful for any kind of DSpace repository: better statistics, deduplication, feed from Scopus, WoS, Pubmed Europe, etc.

DSpace-CRIS 7: architecture

We contribute back general features to enrich the base DSpace (logic & UI)
We create extension points to nicely integrate (plugin) additional CRIS functionalities



The DSpace-CRIS data model

Additional entities, interactions with the DSpace data model (authority framework), enhanced metadata

DSpace-CRIS entities: metadata aka properties

- We don't embrace a specific metadata schema / format: as many standards are equally valid for different communities, we prefer to support easy crosswalk to all needed formats
- Data are stored in typed columns: number, date, string, reference to other entities – ready for further characterization of the value (semantics, date-range validity) not currently implemented in the UI
- Nesting is managed natively with the support for child objects. No limitation about repeatable nested metadata
- Data structure is kept in the database instead of in an external configuration file (input-form) to enforce data integrity

DSpace-CRIS visibility and security

- Each DSpace-CRIS entity instance has a status flag
 - Public: the details page is visible to anyone and it will be linked where appropriate. The record is included in public search results
 - Private: only administrators can access the details page. The entity is indexed only for use as authority entry
- Each property value has an edit mode:
 - Editable
 - Visibility flag only
 - Only Administrators
 - Read only
- A property become visible when included in a public visible tab/box

This only applies to non-admin users allowed to edit DSpace-CRIS entities. Out-of-box only RP supports editing by non-admin, the RP owner

DSpace-CRIS visibility and security - 2

- Visibility of a tab or box can be restricted to
 - System administrators
 - Only RP owner
 - Admins and RP Owner
 - specific users and groups related to the *entity instance*
- To restrict the visibility of a box or tab to specific groups or users one or more properties must be indicated containing the users and/or groups that have access to the protected box / tab
- In this way it is possible to make visible a box of a department only to the department director and secretary or a project box only to the investigators

Addressing dspace-cris entities in the dspace “way”

- DSpace-CRIS objects can be exposed to the DSpace functionalities as normal DSpace objects with metadata
- Each property is exposed as a metadata with
schema = default value depending on the CRIS entity type
element = *shortname* of the property
- The value is the string representation of the property value. For pointers (links to other entities)
 - *<schema>.<element>* has the “display value” of the pointer as value and the CRIS ID as authority
 - *<schema>.<element>.<qualifier>* is automatically mapped to the property with *shortname* = *qualifier* in the linked dspace-cris entity
- For nested objects (or combos) the qualifier gives access to the specific property in the nested
- **The last two “expansion” mechanisms don’t work for * wildcard metadata access (crisrp.*.* or crisrp.dept.*)**

Addressing dspace-cris entities in the dspace “way” - 2

The schema used are as follow

- ResearcherPage → crisrp
- Project → crispj
- Organisation → crisou
- ResearcherObject → cris<shortname> (crisjournal, crisevent, etc.)

Some examples

- *crisrp.fullName* is the name of a researcher
- *crisrp.dept* contains the name of the department as value and the ID of the CRIS OrgUnit as authority
- *crisrp.dept.description* is the description of the department where the researcher is affiliated
- *crisrp.affiliation.affiliationorgunit* are the organisations listed in the nested affiliation objects (with value and authority)

Exposing dspace-cris info to dspace items

- The Item object has been wrapped to add support for virtual metadata
- The wrapper is defined in the [cris-metadata-enhancers.xml](#) spring file
- Using AOP (intercept calls to `getMetadata*` methods) it adds virtual metadata calculated using logic from a
 - [CrisItemEnhancer](#): to expose as *crisitem.<alias>* information from linked CRIS entities
 - [ItemEnhancer](#): to expose as *item.<alias>* information generated from an item metadata (*placeholder.placeholder.placeholder* allows the generation of values regardless of existing metadata)

Exposing dspace-cris info to dspace items

Examples include

- use researcher (project, journal, etc.) metadata to index linked publications
 - expose researcher (project, journal, etc.) metadata over OAI-PMH as item metadata
- *crisitem.author.dept* exposes the mainAffiliation of the linked researcher profiles
- *crisitem.project.grantno* exposes the projectNumber recorded in the linked project (dc.relation)

Expose nested cris information

- Information from nested objects or linked cris objects is available on cris objects only when directly accessed using the getMetadata (no * wildcard support)
- In many cases access is needed to all “metadata” of a CRIS object (search, browse, etc.)
- A [CrisEnhancer](#) infrastructure is available for that. Wherever possible, it is recommended to use the same syntax as the natural navigation to expose the information i.e. *crisrp.dept.description* etc.

How to collect data about CRIS entities

DSpace-CRIS has multiple ways to collect data related to CRIS entities:

- Manual input of information via the administrative UI (good for small organisations with limited amount of data)
- Importing / updating data from external systems that act as masters for specific entities (HR system for researcher profile information, grants database, etc.). Right now [via xls file](#) in DSpace(-CRIS) 7 via REST webservices
- Creating the entities as part of a DSpace item submission.
- Creating the entities submitting items in special collections configured to collect data about projects, organisations, etc.

Take advantage of the rich data model

Inverse relations, Components, Metrics, Statistics, Viewer framework

Navigate the inverse relations

- DSpace-CRIS can use the SOLR indexes to reverse a relation
- Publications are linked to the researcher profile →
- But you can also list the publications under a specific researcher profile ←
- Relations are defined in the configuration spring file [cris-relationpreference.xml](#) and characterized by
 - A name
 - The target entity (a CRIS Entity or a DSpace Item)
 - The SOLR query with $\{0\}$, $\{1\}$ placeholders to be replaced with the *CRIS-ID* or the *uuid* of the source CRIS instance

Navigate the inverse relations - 2

- Inverse relations can be
 - Visualized
 - Used to show aggregated statistics (discussed later)
- To be visualized, relations are embedded in components (see [cris-components.xml](#))
- Components are pluggable JAVA logic to be executed at the time when a CRIS object is visualized
- They typically provide information (i.e. act a **Controller** in the **MVC** pattern) to be visualized by a custom JSP fragment (**V**). Each box can declare which custom JSP is used.

Clustering of related objects

- Out-of-box, components are available to allow configurable rendering of inverse relations for all entities (dspace items and dspace-cris entities)
- It is possible
 - to configure which facets show in the component
 - to apply filters to the relation
 - It is possible to enable a [clustering using custom categories](#) defined by [facet queries](#)
- Clustering is aware of the preferences expressed for the relation, so it is possible to exclude hidden objects.

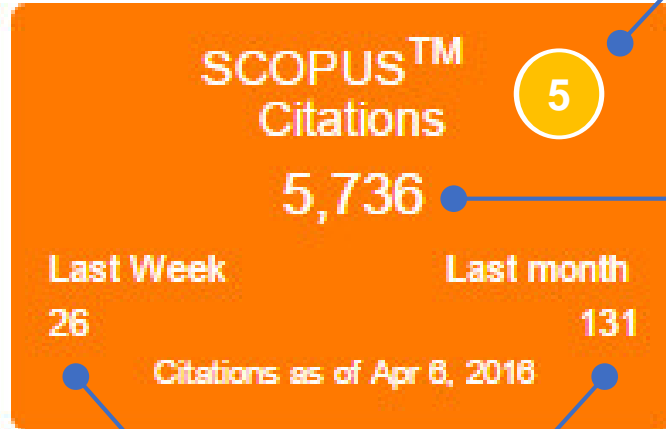
Hidden, unlinked and selected objects

- An object can be **hidden** in the list of linked objects from a CRIS object because it is not “so relevant” (for instance old publications, old versions or different edition of the same publication in a researcher profile)
- An object can be **promoted** to be part of a selected (ordered) list of linked objects for a specific CRIS object (primary publications of a researcher)
- An object could be wrongly linked to a CRIS object so it should be **unlinked** by the CRIS object owner
- This actions can be performed using the <manage relation preference> tool

DSpace-CRIS Metrics framework

- Support to collect metrics information about all the entities in the system (both dspace objects than dspace-cris objects). Data are stored in the database (cris_metrics), other than the ref (ID) to the object
 - metrictype: A short alias of the metric (scopuscitation, etc.)
 - metriccount: The recorded value for the metric (double)
 - remark: custom details (JSON String)
 - startdate – enddate: observed period
 - timestamp[created|modified] Data acquisition time/update
- Scripts to
 - automatically capture bibliometrics from Scopus, Web of Science and PubMed Central
 - freeze statistics data from the SOLR core as usage metrics
 - calculate derivative metrics (percentile, growth, cumulative)

Rank as percentile compared to the other objects in the repository



Metric value (citation number) linked to an external detail page when provided

Growth tracked locally

Scopus Preview

This is a preview of SCOPUS. [Click here](#) to learn more about accessing SCOPUS with our Integration Services. Visit also our [SCOPUS Info Site](#)

The ferric reducing ability of plasma (FRAP) as a measure of 'antioxidant power': The FRAP assay
Benzie I.F.F., Strain J.J.
(1996) *Analytical Biochemistry*, 239 (1), pp. 70-76.
Is cited by: Set feed

5,759 documents that cite: Analyze search results

Search within results...

Refine

Limit to Exclude

Year

- 2016 (283)
- 2015 (847)
- 2014 (792)
- 2013 (773)
- 2012 (658)

Author Name

- Apak, R. (41)
- Benjakul, S. (30)

Export Download View citation overview View Cited by More...

- Scientific validation of medicinal plants used by Yakkha community of Chanuwa VDC, Dhankuta, Nepal Subba, B., Srivastav, C., Kandel, R.
- Show abstract | Related documents
- From rice bag to table: Fate of phenolic chemical compositions and antioxidant activities in waxy and non-waxy black rice during home cooking Tang, Y., Cai, W., Xu, B.
- Show abstract | Related documents
- A preliminary study about the influence of high hydrostatic pressure processing in parallel with oak chip maceration on the physicochemical and sensory properties of a young red wine Tao, Y., Sun, D.-W., Górecki, A., (...), Fornal, J., Jeliński, T.
- Show abstract | Related documents
- Waste chicken eggshell as a natural valuable resource and environmentally benign support for biosynthesis of catalytically active Cu/eggshell, Fe3O4/eggshell and Nasrollahzadeh, M., Sajadi, S.M., Hatamifard, A.

DSpace-CRIS Metrics framework - 2

org.dspace.app.cris.metrics.[scopus|wos].script. ScriptRetrieveCitation

- Get citation count for DSpace items that have an identifier suitable for the provider (DOI, PMID, EID, UT)
- Cumulate citation and number of items as metric on the researcher profile
- Work on a configurable number of items, skipping recent processed items and sleeping between requests to meet API usage limit
- Save the provider identifier to the item metadata
- PMC Script has an additional structure to store fine-grain information about citing item (e.g. mining of cross-references among DSpace items in the same repository)

DSpace-CRIS Metrics framework - 3

- The current value of each metric (last = true) is [exposed as dynamic field crismetrics <metrictype>](#) in the SOLR search document for sorting and projection
 - SOLR server accesses the DSpace database using the credentials configured in the [database.properties file](#)
- Data are cached in memory by SOLR and updated when: a new searcher is opened, new metrics are collected from the built-in scripts, or a refresh metric cache is manually triggered

`${solr.url}/search/select?q=*:*&fl=clearcache-crismetrics`

DSpace-CRIS Metrics framework - 4

Internal and derivative metrics are built by configurable providers defined as spring beans

- [usage data from the statistics core](#) (view & download)
- [variation of a metric over predefined period](#) (_period1, _period2)
- [percentile positioning of the object](#) compared to the other objects in the repository by the metric value
- [other computed metrics](#) can be configured reading from an item or cris object metadata



Page view(s)

411

Last Week

150

Last month

Checked out

Item View & Download Statistics: The ferric reducing ability of plasma (FRAP) as a measure of 'antioxidant power' : the FRAP assay

Views

Downloads

RSS Feed

Geo Map



Region

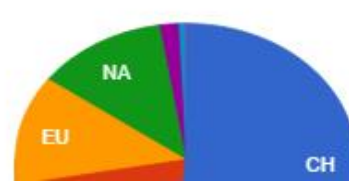
Country

City

Time

Save as a PNG

Save as a JPEG



- CH
- HK
- EU
- NA
- AS
- SA

DSpace-CRIS Metrics framework - 4

- The absolute link to the detailed statistic page is stored in the remark of the metric (pay attention if you clone the database)
- Last week (`_period1`) and last month (`_period2`) are calculated from the recorded metrics. It needs manual fix if you withdraw/modify usage data between runs
- The `cris_metric` table grows limitless: a purge/archive strategy for old/unused data should be set up

Statistics: DSpace-CRIS enhancements

- Served by Spring two configurable controllers (one for DSpace objects, one for DSpace-CRIS objects)
- For each entity it is possible to define the statistics components to show (tabs)
 - For instance a collection show
 - View of the collection
 - View of items in the collection
 - Download of items in the collection (view of item's bitstreams)
 - Upload of item in the collection
 - For DSpace-CRIS entities the default is to use the same components used for the visualization

Statistics: DSpace-CRIS enhancements

- DSpace-CRIS uses SOLR Join queries to aggregate statistics of related objects, including bitstream views, under a specific item.
- There are some consequences:
 - Use of SOLR shards is not possible as you will need to join over distributed SOLR cores
 - It is unnecessary to rebuild statistics indexes, a very expensive activity, if the repository structure changes (merge of collections, change of item metadata, etc.)
 - An additional field is stored in the SOLR statistics document with the unique ID of the corresponding object in the search core (the uuid or the resourcetype-resourceid)

Please note that DSpace-CRIS statistics data remain compatible with a standard DSpace as they only include an additional field

Repository home page

Sections are defined in the [cris.cfg](#)

The name assigned to each section corresponds to a [discovery configuration](#)

The global search infographics can be configured in the [cris-layout-processor.xml](#)

Dynamic components (most viewed, etc.) are configured in the [dspace.cfg](#) as `SiteHomeProcessor`

The screenshot shows the repository home page for Cyprus University of Technology. The navigation bar at the top includes links for Home, Communities & Collections, Research Outputs, Researchers, Faculty & Departments, Theses, Patents, Projects, Help, and Language. A red box highlights the Research Outputs, Researchers, Faculty & Departments, Theses, Patents, and Projects links. Below the navigation bar, the page title is 'Ktisis at Cyprus University of Technology'. The main content area features a 'Welcome to Ktisis' message, a 'THE WORLD UNIVERSITY RANKINGS' logo, and a 'THE YOUNGEST AMONG THE TOP EUROPEAN UNIVERSITIES' banner. A search bar is located below the banner. Three infographics are displayed: 'People' (315), 'Faculty & Departments' (22), and 'Publications, books, articles...' (1206). A blue box highlights the search bar and these three infographics. Below the infographics, there are three sections: 'Recent Submissions', 'Most Viewed', and 'Most Cited'. A blue box highlights the 'Most Viewed' and 'Most Cited' sections. The 'Most Viewed' section displays an article titled 'An analytical solution in probabilistic rock slope stability assessment based on random fields' by Gravanis, Elias & Pantelidis, published in the International Journal of Rock Mechanics and Mining Sciences in 2014. The 'Most Cited' section displays an article titled 'A strong regioselectivity effect in self-organizing conjugated polymer films and high-efficiency polythiophene: fullerene' by Yungkyoo, Cook, Steffen, published in Nature materials in 2006.

Repository Sections “home page”

Browse, search indexes and dynamic components available in each section are configured in the [cris-processor.xml](#)

DSpace-CRIS DEMO / Research Outputs

Browse

- Department
- Author
- Title
- Type
- Issue Date
- Subject

Search Research Outputs

All | All | All | All | Title | Author | Journal | Subject | Date Issued | Type | Fulltext

AND | AND | +

Reset | Search

Recent Submissions

- Leadership, social capital and incentives promote successful fisheries**
Gutiérrez, Nicolás L.; Hilborn, Ray; Defeo, Omar
- Particle collisions from the ATLAS experiment | Type: Image

Top Viewed

- Sample Book** Blue, Earth; Red, Mars; White, Europa | Type: Book | 237
- Free World Cities Database** Pascarelli L.A. | Type: Other | 147

DSpace-CRIS for research data



- Support for next OpenAIRE Guidelines for Data Archives (Datacite 4.1)
- Links to other entities (researchers, publications, projects, etc)
- Integration with CKAN:
 - to visualize streamed tabular data
 - to expose streamed data to external analysis via API (with access control from DSpace-CRIS)

Relations between items

Please use this identifier to cite or link to this item: <http://hdl.handle.net/123456789/13>

Title: Example of XLS to setup CRIS data model

Authors: [Bollini, Andrea](#)

Issue Date: 2016

Project: [Gamma ray burst](#)

Related Publication: [Research Data sample item](#)

Conference: [Conference on High Energy](#)

Abstract: This is the sample data model configuration sheet for the [org.dspace.app.cris.batch.StartupMetadataCo](#)

URI: <http://hdl.handle.net/123456789/13>

Appears in Collections: [Datasets](#)

Show full item record

SCOPUS™ Citations
10
checked on Nov 8, 2016

WEB OF SCIENCE™ Citations
45

publication(s)

Title: DSpace-CRIS 5 Technical documentation

Authors: [Bollini, Andrea](#)
[Pascarelli, Luigi Andrea](#)

Issue Date: 2016

Project: [DSpace-CRIS Open Source: CRIS made easy with DSpace](#)

Related Dataset:
[Example of CSV to import items into repository](#)
[Example of XLS to import organizations into repository](#)
[Example of XLS to import projects into repository](#)
[Example of XLS to import researchers into repository](#)
[Example of XLS to import journals into repository](#)
[Example of XLS to import events into repository](#)
[Example of XLS to setup CRIS data model](#)

Journal: [Music and waves](#)

Abstract: The DSpace-CRIS technical documentation provides useful information to setup, configure and

back link

Relations between items

- Authority to provide lookup over (a subset of) the repository items
- Consumer to automatically add the inverse relation to the target item once the linking item is published (approved)

DSpace-CRIS use cases: Research Data

- 4Science released, free and open source, an integration with CKAN, the world's leading open-source data management platform
- Using an extensible viewer framework you can now offer data discovery, exploration, preview, sampling and visualization from your DSpace-CRIS repository
- CKAN makes open webservices for tabular data available:
<https://ckan.org/>
- DSpace-CRIS & DSpace-CKAN add-on:
<https://github.com/4Science/dspace-ckan>

DSpace-CRIS use cases: Research Data

DSpace-CRIS DEMO / Research Output / Datasets

Please use this identifier to cite or link to this item: <http://hdl.handle.net/123456789/31>

Title: Free World Cities Database

Authors: [Pascarelli L.A](#) 

Issue Date: 2016

Publisher: MaxMind

Description: Includes city, region, country, latitude and longitude. This product doesn't contain any IP addresses. It's simply a listing of all the cities in the world. For IP to city mappings, see our MaxMind City product.

URI: <https://www.maxmind.com/en/free-world-cities-database>
<http://hdl.handle.net/123456789/31>



Appears in [Datasets](#)
Collections:



Files in This Item:


File	Description	Size	Format	
worldcitiespop.csv	City and country by MaxMind	147.6 MB	Tabular Data	Explore online 

[View/Open](#)

[Show full item record](#)

 Page view(s)
341 
Last Week: 11
Last month: 11
checked on Apr 12, 2017

 Download(s)
352 
checked on Apr 12, 2017

 Google ScholarTM
Check

CKAN Add-On Module: preview tabular & geospatial data

Paginated and filterable

Grid Graph Map 639 records « 1 – 100 » Search data ... Go » Filters

lon	lat	clase	municipio	nombre	dirección	actividad
-16.637585	28.1580...	turismo	Vilaflor	Hotel Vill...	Cm San ...	alojamie...
-16.637835	28.1549...	turismo	Vilaflor	El Somb...	Cl Santa...	alojamie...
-16.662599	28.1216...	turismo	Vilaflor	El Nogal	Cm Real...	alojamie...
-16.636974	28.1593...	turismo	Vilaflor	Tio Paul...	Pz La Igl...	alojamie...
-16.636297	28.1585...	turismo	Vilaflor	Los Gira...	Cl Dolor...	alojamie...
-16.66551	28.1187...	turismo	Vilaflor	Los F...	Cm San ...	alojamie...
-16.666047	28.116...	turismo	Vilaflor	Los F...	Cm San ...	alojamie...
-16.636497	28.157...	turismo	Vilaflor	Los F...	Cm San ...	alojamie...
-16.366122	28.512...	turismo	Vilaflor	Los F...	Cm San ...	alojamie...
-16.35427	28.496...	turismo	Vilaflor	Los F...	Cm San ...	alojamie...
-16.3502...	28.525...	turismo	Vilaflor	Los F...	Cm San ...	alojamie...
-16.425668	28.502...	turismo	Vilaflor	Los F...	Cm San ...	alojamie...
-16.300875	28.408...	turismo	Vilaflor	Los F...	Cm San ...	alojamie...

Grid Graph Map 3 records « 1 – 3 » albatros Go » Filters

lon	lat	clase	municipio	nombre	dirección	actividad
-16.783282	28.1292...	turismo	Adeje	Albatros	Av Jable ...	alojamie..
-16.6439...	28.0056...	turismo	Arona	Parque Albatros	Lg Costa...	alojamie..
-16.610889	28.0260...	turismo	San Miguel	Parque Albatros	Ur Golf d...	alojamie..

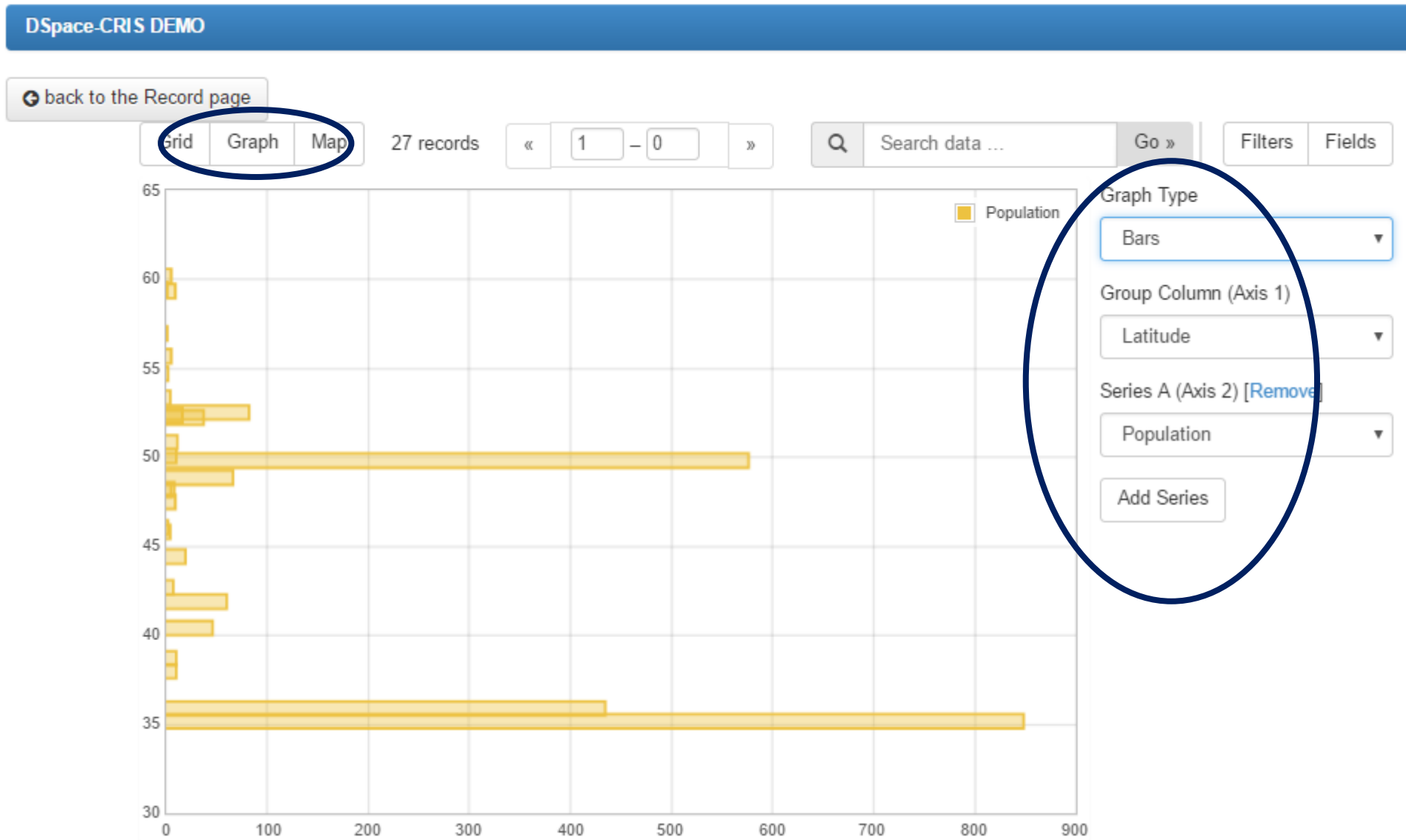
Filters

Field
lon

Add

CKAN Add-On Module: preview tabular & geospatial data

Graph visualization



CKAN Add-On Module: preview tabular & geospatial data

Interactive map visualization

Grid Graph **Map** 639 records « 1 – 100 » Search data ... Go » Filters

lon	lat	clase	municipio	nombre	dirección	actividad
-16.637585	28.1580...	turismo	Vilaflor	Hotel Vill...	Cm San ...	alojamie...
-16.637835	28.1549...	turismo				
-16.662599	28.1216...	turismo				
-16.636974	28.1593...	turismo				
-16.636297	28.1585...	turismo				
-16.66551	28.1187...	turismo				
-16.666047	28.1168...	turismo				
-16.636497	28.1572...	turismo				
-16.366122	28.5127...	turismo				
-16.35427	28.4963...	turismo				
-16.3502...	28.5253...	turismo				
-16.425668	28.5024...	turismo				
-16.300875	28.4085...	turismo				

Grid Graph Map 639 records « 1 – 100 » Search data ... Go » Filters

Latitude / Longitude fields
 Latitude / Longitude fields
 GeoJSON field

Latitude field
lat

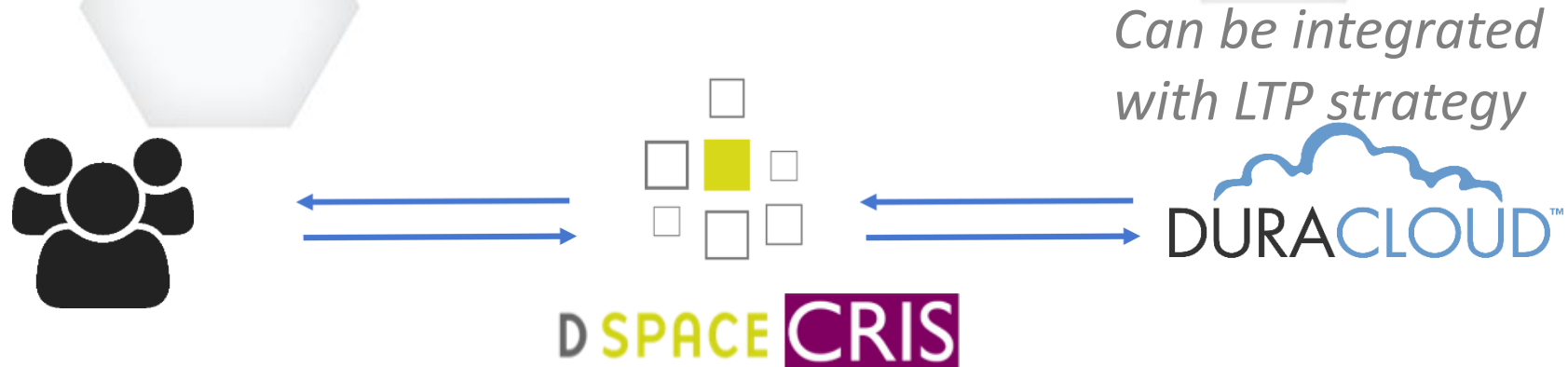
Longitude field
lon

Update

Auto zoom to features
 Cluster markers

Leaflet | Map data © 2011 OpenStreetMap contributors, Tiles Courtesy of MapQuest

CKAN Integration Add-On: architecture



- Open access
- Embargo
- Restricted



Open Source, get it from GitHub!

DSpace-CRIS use cases: beyond publications

Image files (medical, astrophysics, cultural heritage: digitalized manuscript, rare books, etc.) need to be consulted online, discussed and commented / annotated

IIIF protocols and formats allow you to meet these requirements in a standard and understandable way (for both humans and machine)

DSpace-CRIS use cases: Images

- An astrophysics image can be over 5GB!
- High-quality scanned books have images typically over 100MB for each page
- Medical images can also be very large
- The structures of image sequences are complex and relevant (page sequences, evolution of phenomena in medical images, etc.)

DSpace-CRIS use cases: beyond publications

The same requirements apply to audio and video content

- Streaming
- Internal structure
- Annotation / commenting / transcript

Adopt an open standard: the MPEG-DASH format allows adaptive streaming over simple html client with full support for multiple tracks, ToC, subtitles

DSpace-CRIS Viewers framework

- You can add viewers simply implementing the [JSPViewer interface](#) and [exposing them as spring beans](#) in your DSpace Spring context
- You can mark a bitstream to be used with one or more viewers using the metadata ***bitstream.viewer.provider***. The metadata value must match the viewer bean id
- You can avoid direct download of the bitstream adding the value ***nodownload*** to the previous metadata
- The UI has been extended to provide edit capabilities for metadata on all the DSpace objects. You can edit bundle and bitstream using the button provided in the administrative edit-item or you can build your own link following the syntax below

`${dspace.url}/tools/edit-dso?resource_id=xxx&resource_type=yyy`
(use the uuid parameter in DSpace-CRIS 6.x)

DSpace-CRIS add-ons

The IIF Image Viewer, Document Viewer, OCR & Transcription, Video/Audio Streaming are add-on modules presently distributed by 4Science with an innovative business model: contribute to make them open source soon!

<http://www.4science.it/en/dspace-add-ons/>

The IIF Image Viewer

The screenshot displays the IIF Image Viewer interface. On the left, a sidebar shows a list of thumbnails for manuscript pages, including Dante004.tif (2 results), Dante005.tif (7 results), Dante006.tif (6 results), and Dante007.tif. The main area shows a large image of a manuscript page with the text "tutto 'l cerchio uolte" highlighted in blue. Below the image, a search bar contains the text "cerchio" and shows "29 results found for 'cerchio'". The interface includes navigation controls like "Previous Result" and "Next Result", and a footer with the "4SCIENCE" logo and the tagline "Share your knowledge".

CONTENTS Dante con l'esposizioni di Christoforo Landino et...

Index Thumbnails

Dante004.tif 2 Dante005.tif 7

Dante006.tif 6 Dante007.tif

tutto 'l **cerchio** uolte

e tutto insieme tondo.

erchio, altrame

page Dante005.tif of -

29 results found for 'cerchio' Clear

Previous Result Next Result

4SCIENCE

Explore by

4SCIENCE Share your knowledge

OCR

Limbo. de Virgiliogn'el'quartè canto,oue d'efib primo cerchio fi tratta, cemma' "èlfer in quello cerchio in luogo ameho,e luminoso me dice a Dante,Hor difcendiam quà. giù nel ciè'co'm'oi1do ., E piu diante lofpl_énd'or d'un fùoco , che era in quello , ma diuifi in oltre, difcefi che fi1rc>li1 & quello, il poem'd'1ee di Virgilio Cox? duep'ar'ti, che l'una conrien l'altra,cioè, quelli che ne la contè- mi mile,e cofimi fe ightrare Nel primo cerchio,'thp l'abiffo gi— 4plàtiua,da quelli ehèl'at:itxa uita s'erano efiercitati. Onde.ha- gne.In quello primo @erchio adunque pone i' pagnoli morti len ' _ mendo detto delgi- 1.att1uil,e;polenglodir de comemplatiui dice, za battefimo,e nel peccato originale,e quelli che innanzi a l'a— . Poi—"Che malza1 un poco p1ule cxgha Yidi'l maello di color, uenimento di Chriiip non eye-deren in lui uenturo, ma uifTe—' . thefantlo,5ecler tra-philofopli- ea fàmilia,&c.E la pena di tut— ro moralmente letonigio la _lègge de la "natura , :

Additional features

Deduplication, Display Strategies, Exports, Signposting

Import of publications from external databases

DSpace-CRIS uses the standard BTE framework as DSpace but supporting additional data providers:

- ADS Astrophysic Database System (free)
- ORCID (free)
- Scopus (requires subscription with the data provider)
- Web of Science (requires subscription with the data provider)

Extract metadata from the PDF

Through the integration with [GROBID Library](#), DSpace-CRIS leverages machine learning technologies [for extracting information directly](#) from PDF publications.

New submission

Search Form Results

> Default mode Submission

> Search for identifier

▼ Upload a file

Select a file to upload and its type from the drop-down menu. If "Preview Mode" is enabled, the list of the publications in the file will be shown to you to select the one for submission. If it is disabled, all publications will be imported in your MyDSpace page as "Unfinished Submissions" while the first one will go through the submission process.

Select data type:

File:

Collection:

Please, specify the file format

- Please, specify the file format
- PubMed XML
- CrossRef XML
- arXiv XML
- CiNii XML
- BibTeX
- Research Information Systems (RIS)
- EndNote
- Comma Separated Values (CSV)
- Tab Separated Values (TSV)
- PDF

Process

Exit

- Title
- Authors
- Abstract
- Keywords
- Identifiers
- Issue Date
- Journal title
- ISSN
- Volume
- Issue
- pages

are extracted through parsing of uploaded full-text.

Scanning of external databases

- Scripts are provided to query periodically the following bibliographic databases for publications of the institution
 - PubMed Europe (includes retrieval of PDF files where available)
 - Scopus
 - Web of Science
- Records are mapped to the DSpace internal metadata schema and queued in the [DBMS Border tables to be imported](#)
- Deduplication can be used to merge records found in multiple sources or previously entered
- The new-publication-claim feature can be used to link publications to authors

Duplication alert

- System prompts for potential duplicates during submission and workflow

The system recognized some products that might be duplicates, please check the list carefully, and select the appropriate action. **If your entry is really a duplicate Interrupt it ! You can ask the submitter of the record "master" (if you have not been published) or system administrators to make changes**

Summary	Collection	Last modified	Actions
2010-08. The "J curve" problem revisited: old and new findings <i>Grassi, Guido, Quarti-Trevano, Fosca, Dell'Oro, Raffaella, Mancia, Giuseppe</i> Submitter: Bollini Andrea Identifier: hdl:20.500.12345/3 Status: Archived	test collection	19/9/2016 17:42	<input type="button" value="⚙️"/> <input type="button" value="Create duplicate"/> <input type="button" value="It is not a duplicate"/>

Cancel

The background shows a submission form with fields for Authors, Title, and a 'Submit: Describe' button. The authors listed are Quarti-Trevano, Dell'Oro, Mancia, and Fosca. The title is 'The "J curve" problem revisited: old and new findings'.

Deduplication dashboard

The image shows a screenshot of the DSpace-CRIS deduplication dashboard. The interface is divided into several sections:

- Top Navigation:** Includes links for Home, Content, CRIS Module, Access Control, Statistics, General Settings, and Help. A user is logged in as andrea.bollini@4s...
- Header:** A green bar displays "DSpace-CRIS at Local Bollini".
- Main Title:** "Records duplicates for Title". Below it, a note states: "The page show the potential duplicate group by signature. You can select the items to compare or reject. The system records the action 'No duplicate' so the match is not show in".
- Comparison Interface (Left):** A "Deduplication" panel with tabs for "All" and "Compare". It shows a table with columns for "TITLE", "Submitter check", and "Administrator check".

TITLE	Submitter check	Administrator check
1	0	1
- Record Detail View (Center):** Displays the details for a record titled "The 'J curve' problem revisited: old and new findings".
 - DSpace CRIS:** Description of the data model and tools.
 - Identifier:** <http://hdl.handle.net/20.500.12345/3>
 - Admin Tools:** Edit (Submission mode), Edit (Normal mode), Export Item, Export (migrate) Item, Export metadata.
 - Buttons:** Duplicate 2, Google Scholar Check.
 - Metadata:**
 - Title: The "J curve" problem revisited: old and new findings
 - Authors: Grassi, Guido; Quarti-Treviso, Fosca; Dell'Oro, Raffaella; Mancina, Giuseppe
 - Issue Date: Aug-2010
 - Journal: Current hypertension reports
 - Abstract:** This paper critically addresses the issue of the "J-curve" paradox—the finding described in studies performed about 30 years ago indicating that treatment-induced systolic blood pressure values below 120 or 125 mm Hg and diastolic blood pressure values below 75 mm Hg are characterized by an increase, rather than a reduction, in the incidence of coronary events. This paper focuses on four major subjects: 1) the benefits of a lower blood pressure target during treatment; 2) the historical background of the "J-curve" phenomenon; 3) the evidence collected in recent clinical trials regarding the existence of a "J-curve" in treated hypertensive patients; and 4) the recent recommendations by the Task Force Committee of the European Society of Hypertension on blood pressure goals to be achieved during treatment.
- Right Panel:** A list of records with "No duplicate" and "Compare" buttons, and a "Delete" button for each.

Merge tool

DSpace-CRIS at Local Bollini

Records duplicates for TITLE

Entities

Title: The "J curve" problem revisited: old and new findings
Author: Grassi, Guido
Author: Quarti-Trevano, Fosca
Author: Dell'Oro, Raffaella
Author: Mancia, Giuseppe
Date issued: 2010-08
Type: Article
Collection:test collection
Handle:20.500.12345/3

Title: The "J curve" problem revisited: old and new findings
Author: Grassi, Guido
Author: Quarti-Trevano, Fosca
Author: Mancia, Giuseppe
Date issued: 2010-08
Collection:test collection
Handle:20.500.12345/5

Bitstreams

Item Id	Select	Name	Order	MD5
1	<input checked="" type="checkbox"/>	database.png	7791	52fct
3	<input checked="" type="checkbox"/>	change.png	3028	241c

Show/Hide values

localhost:8080/jspui/tools/duplicate

- AUTHORS (DC.CONTRIBUTOR.AUTHOR) Delete
- Grassi, Guido 1 3
Authority key: rp00003
- Quarti-Trevano, Fosca 1 3
Authority key: rp00002
- Dell'Oro, Raffaella 1
Authority key: rp00004
- Mancia, Giuseppe 1 3
Authority key: rp00001
- DATE OF ISSUE (DC.DATE.ISSUED) Delete
- 2010-08 1 3
- ABSTRACT (DC.DESCRPTION.ABSTRACT) Delete
- This paper critically addresses the issue of the "J-curve" paradox--the finding described in studies performed about 30 years ago indicating that treatment-induced systolic blood pressure values below 120 or 125 mm Hg and diastolic blood pressure values below 75 mm Hg are characterized 1 3
- IDENTIFIERS (DC.IDENTIFIER.PMID) Delete
- 20524090 1
- IDENTIFIERS (DC.IDENTIFIER.URI) Delete
- http://hdl.handle.net/20.500.12345/3 1
- http://hdl.handle.net/20.500.12345/5 3


Deduplication technical details


- Two items are flagged as potential matches if they share at least one signature (this is largely inspired by the [SOLR official deduplication approach](#))
 - A [signature](#) is a value that summarizes information in the item using a [pluggable transformation](#) (case insensitive, ascii transcription, identifier normalisation, etc)
- Feedback on potential matches (reject or duplicate flag) are stored in the database table dedup_reject
- Signatures and matched groups are stored on a dedicated SOLR core that is maintained using DedupEventConsumer
 - Use [DedupClient](#) to rebuild the index or build it the first time if you are migrating from a previous version


CORE Recommender for Items


CORE Recommender


Suggested articles


 Camera Tracking in Visual Effects - An Industry Perspective of Structure From Motion
Provided by: University of Bath OPUS | **Year:** 2016
By Barber Alastair, Cosker Darren, James Oliver, Waine Ted, Patel Radhika

 DIGITAL, The Quiet Revolution in Filmmaking from Script to Screen. A case study called VIOLET CITY
Provided by: LJMU Research Online | **Publisher:** Avanca Film Festival
By Maxwell JP

 A Game Engine as a Generic Platform for Real-Time Previz-on-Set in Cinema Visual Effects
Provided by: Hal - Université Grenoble Alpes | **Publisher:** HAL CCSD | **Year:** 2015
By De Goussencourt Timothée, Dellac Jean, Bertolino Pascal

 Impact of prevalent and incident vertebral fractures on utility: results from a patient-based and a population-based sample
Provided by: DSpace at VU | **Year:** 2007
By Schoor N. van, Ewing S., O'Neill T., Lunt M., Smit J., Lips P.

 A review of the Malaysian film industry: Towards better film workflow
Provided by: UWE Research Repository
By Dim A. R.

Powered by  CORE

<config/modules/core-aggregator.cfg>

Signposting

- **Signposting** is an approach to make the scholarly web more friendly to machines, exposing relations as Typed Links in HTTP Link headers
- The following patterns are supported in DSpace-CRIS:
 - Author: links to authors ORCID or VIAF records
 - Identifier: link to ORCID from DSpace-CRIS researcher pages, link to the Handle/DOI from the landing page or fulltext (PDF, etc.)
 - Publication Boundary: links to the actual fulltext from the landing page
- See <https://wiki.duraspace.org/display/DSPACECRIS/Signposting>

ORCID integration & technical details

Available features & use cases (authentication, authorization, profile claiming, profile synchronization push & pull, registry lookup); configuration, API-KEY, use of the sandbox, metadata mapping



Create new record - facilitate the creation of new ORCID records for researchers



Connect local profiles with the ORCID registry

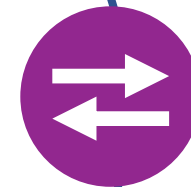


Lookup the registry

**Full integration with ORCiD,
pull and push APIs
for all entities:**

Profiles (incl. Education and
Employment)
Publications
Projects

Transfer information from the repository
to the ORCID Registry and viceversa



Login via ORCID iD
also for external
co-authors (if liked)



ORCID login

Log In to DSpace ?

New user? [Click here to register.](#)

Please enter your e-mail address and password into the form below.


E-mail Address:

Password:

Have you forgotten your password? [Log In](#)

Use your ORCID or create a new one

ORCID provides a persistent digital identifier that distinguishes you from every other researcher and, through integration in key research workflows such as manuscript and grant submission, supports automated linkages between you and your professional activities ensuring that your work is recognized. Click on the ORCID logo to sign in with your existent record or create a new one.

ORCID Login 

By default a new Researcher Profile can be immediately created capturing information from ORCID

ORCID login

The following options are available:

- ORCID Login embedded in the “Password Login” screen
- ORCID Login offered as an independent authentication method
- ORCID Login disabled (only connect to ORCID and claim existing researchers profiles)



[config/modules/authentication-oauth.cfg#L85](#)





A script to automatically pull updated information from the ORCID registry is under development and will be available in the coming weeks


Import publications from ORCID


▼ Search for identifier


Fill in publication identifiers (DOI is preferable) and then press "Search". A list of all matching publications will be shown to you to select in order to proceed with the submission process.


PubMed ID:  
e.g. 20524090


DOI (Digital Object Identifier) :    
e.g. 10.1021/ac0354342

SCOPUS ID: 
e.g. 2-s2.0-0000000117

WOS ID: 
e.g. WOS:000270372400005

ORCID id: 
e.g. 0000-0002-9029-1854

arXiv ID: 
e.g. arXiv:1302.1497

Cinii NAID: 
e.g. 110004744915



Import publications from ORCID

Bollini, A.
2006

[See details & import the record](#)



Guia de instalação DSpace-CRIS

Lucas Ângelo da Silveira, Milton Shintaku, Andrea Bollini
2016

[See details & import the record](#)



Publication metadata in CERIF: Inspiration by FRBR

Dvořák, J., Drobíková, B., Bollini, A.
2014

[See details & import the record](#)



DSpace-CRIS@HKU: Achieving visibility with a CERIF compliant open source system

Palmer, D.T., Bollini, A., Mornati, S., Mennielli, M.
2014

[See details & import the record](#)

ORCiD Registry Lookup

Enter the names of the authors of this item.

Authors

Enter the main title of the item.

Title *

If the item has any alternative titles, please enter them here.

Other Titles

Please give the date of previous publication or public distribution. You can leave out the day and/or month.

Date of Issue * Month: Day:

Enter the name of the publisher of the previously issued instance of this item.

Publisher

Enter the standard citation for the previously issued instance of this item.

Citation

Enter the series and number assigned to this item by your community.

Series/Report No.

If the item has any identification numbers or codes associated with it, please enter the types and the actual numbers or codes.

Identification

PolyHKU: DSpace Value Lookup - Mozilla Firefox

testspacecris.eurocris.org:8080/jspui/tools/lookup.jsp?field=dc_contributor_author&formID=edit_metac

LC Name Authority author lookup

Results 1 to 4 of 4 for "Pascarelli, Andrea"

- Andrea Pasca See "Pascarelli, Luigi Andrea"
Pascarelli, Luigi Andrea (<http://orcid.org/0000-0002-7072-6814>)
Local value 'Pascarelli, Andrea' (not in Naming Authority)
- Name in "Last, First" format
-

A local profile is created at the end of the process

ORCIDAuthority

- An [ORCIDAuthority plugin](#) allows to search the local Researchers Profiles and the ORCID Registry
- Results from the two registries are concatenated without deduplication; use the local entry or the ORCID entry at the end will lead to the same association
- Entry selected from the ORCID Registry gets a temporary authority key

`will be generated::orcid::<orcid-id>`

- A [DSpace consumer](#) watches for deposited items transforming all the temporary keys in an actual CRIS Object. The item will be updated to refer to the real CRIS-ID

Pull information from ORCID

will be generated::`<ext-auth>::<ext-id>`

- The consumer provides [a general infrastructure to create CRIS objects](#) as part of an item submission that goes beyond the simple ORCID use case
- Depending on the involved external authority, a Filler implementation is invoked and the generated CRIS object or its metrics are filled with one or more pieces of information extracted from other item metadata, or dynamically retrieved from the authority, or any other custom logic
- [ORCIDImportFiller](#) is responsible to [PULL biography data](#) from ORCID when a new ResearchProfile is created

Connect existing profiles to ORCID

From a Researcher Page, via the specific “tab” ORCID preferences, it is possible to check and connect the local profile to ORCID








Connect existing profiles to ORCID

ORCID Authorizations

ORCID: 0000-0001-9753-8285

Granted authorizations

-    
- Get your ORCID ID
- Read your ORCID record
- Update your biographical information
- Add works
- Update your works
- Update your funding items
- Add funding items



Missing authorizations

Great!!! This box is empty, so you have granted all access rights to use all functions offers by your institutions. For more informations look at [Privacy policy](#)

ORCID Synchronization preferences

ORCID Synchronization settings

Synchronization mode

Enable "Manual" Synchronization Mode to disable batch synchronization, so you must send your data to Orcid Registry **manually**

Synchronization mode Batch ▾

Batch

Manual

Publications Preferences

Choose your preference for publications

Disable

Send all publications

Send my selected publications

Send my publications

Projects Preferences

Choose your preference for projects

Disable

Send all projects

Send my selected projects

Send my projects

Profile Preferences

Choose your preference for profile

biography **credit-name**

primary-email **name**

iso-3166-country **keywords**

other-emails **other names**

Save Changes Exit

Synchronization mode

- The system can automatically synchronize changes from DSpace-CRIS to ORCID (batch mode) or leave the user to manually synchronize one or more changes to ORCID
 - The batch mode requires the [execution of a CRON Script](#)
 - Users that opt for manual synch will receive an email inviting them to login in the system to check and synchronize

Projects or publications preferences

- All projects mean any project that is linked to the researcher page also if not displayed
- Selected projects are only the projects that were picked up by the researcher in the management projects tool
- My projects are all the projects linked to the researcher except the ones that were hidden



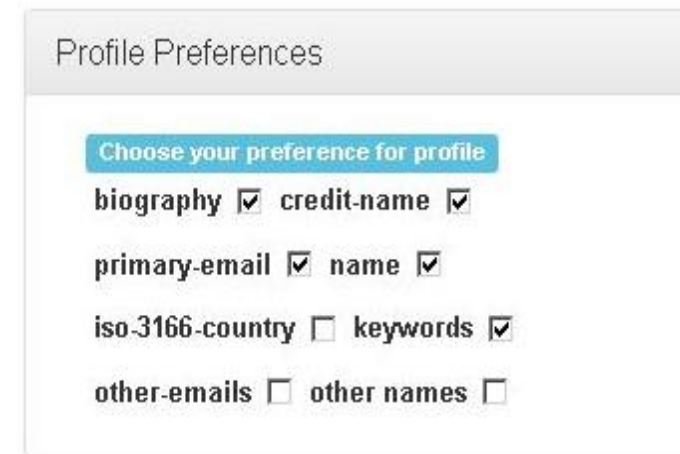
Projects Preferences

Choose your preference for projects

- Disable
- Send all projects
- Send my selected projects
- Send my projects

Biography preferences

- The researcher chooses whose properties can be sync with ORCID
- Preference properties are prefixed with **orcid-profile-pref-** followed by the **name of the source properties** in DSpace-CRIS. The **label is the target property name** in the ORCID model



Profile Preferences

Choose your preference for profile

biography credit-name

primary-email name

iso-3166-country keywords

other-emails other names

<https://wiki.duraspace.org/display/DSPACECRIS/ORCID+Integration#ORCIDIntegration-MappinglocalpropertystoORCID>

Synchronization queue

ORCID Synchronization settings

Publications Preferences

[Send all publications](#)

Projects Preferences

[Disabled](#)

Profile Preferences

[biography](#) [primary-email](#) [credit-name](#)

[iso-3166-country](#) [keywords](#) [other-emails](#)




[name](#) [other-names](#)

ORCID Registry Queue

The batch system in the next run will send the follow data to the Orcid Registry

Synchronization activated

Show entries Search:

Name		
	Pascarelli, Andrea	Send
	This is a test case for ORCID claim	Send
	test	Send

Showing 1 to 3 of 3 entries

Manual PUSH

ORCID Sync queue & history

- The ORCID queue (cris_orcid_queue table) is populated using:
 - A dspace consumer that watches all changes to DSpace Items
(org.dspace.app.cris.integration.authority.CrisOrcidQueueConsumer)
 - A Hibernate listener that watches all changes to DSpace-CRIS objects and nested RP objects used for education and employment
(org.dspace.app.cris.model.listener.OrcidQueueListener)
- The queue is processed by the batch script or by the UI when the user hits the send button
- The cris_orcid_history table contains the response message and codes for any push action to ORCID. The PUT code assigned to the “generated” object in the ORCID registry is stored here

42,377 ORCID iDs and counting. See more...

Preferred name



Show archived

ORCID ID
ID sandbox.orcid.org/0000-0002-9421-192X
View public version

From	Subject	Date	
▼ DSpace-CRIS Demo WebSite	Your ORCID Record was amended	2016-02-19	📄

DSpace-CRIS Demo WebSite has updated items in the Work section of your record.

Archive View on your record

Preferred name

ORCID ID
ID sandbox.orcid.org/0000-0002-9421-192X
View public version

Get a QR Code for your iD ?

Also known as
DSpace-CRIS, Researcher

Country

Keywords

Websites

Emails
researcher.dspacecris@mailinator.com

Biography

▼ Education (0) + Add education ⌵ Sort

You haven't added any education, [add some now](#)

▼ Employment (0) + Add employment ⌵ Sort

You haven't added any employment, [add some now](#)

▼ Funding (0) + Add funding ⌵ Sort

You haven't added any funding, [add some now](#)

▼ Works (1) + Add works ⌵ Sort

Test Article for ORCID 📄 👤 🔑 🔒

Sample journal
2015-01-01 | other
SOURCE-WORK-ID: 65
URL: <http://demo-dspace-cris.cineca.it/handle/123456789/41>
Source: DSpace-CRIS Demo WebSite Preferred source 📄 🗑️

ORCID Mapping

- Mapping between the Researcher Page properties and the ORCID profile is implicitly managed by the configuration of the biography preference properties
- Mapping from the DSpace Item metadata to the ORCID Work is done in [orcid-work-metadata.properties](#)
 - The [orcid.citation_crosswalk](#) configuration properties defines the [dissemination crosswalk](#) to use to create the citation record (BibTeX, etc)
- Mapping from the CRIS Project properties and the ORCID Funding is done in [orcid-funding-metadata.properties](#)

ORCID Access tokens

- An access token, valid for all the scopes configured in [authentication-oauth.cfg#L71](#), is obtained when a user logs in with ORCID or connects their ORCID profile
- The access token is stored in the *eperson.orcid.accesstoken* of the logged-in EPerson and copied in the following RP properties:
system-orcid-token-authenticate, system-orcid-token-orcid-profile-read-limited, system-orcid-token-orcid-bio-update, system-orcid-token-orcid-works-create, system-orcid-token-orcid-works-update, system-orcid-token-funding-create, system-orcid-token-funding-update

Claim a researcher profile

The screenshot shows a DSpace website interface. At the top, a navigation bar includes links for 'Communities & Collections', 'Research Outputs', 'Researchers', 'Organizations', 'Projects', and 'Help'. A search icon and a user profile icon are on the right. The main content area features the 'DSpace CRIS' logo and a description: 'DSpace-CRIS consists of a data management system and a set of tools to manage the data. Since DSpace-CRIS involves other CRIS Level Dynamic Objects (single entities) because any profile can define its own...'. Below this is a 'Learn More' button and a green banner for 'DSpace-CRIS Demo Site'. The profile of 'Pascarelli, Luigi A.' is displayed, with tabs for 'Profile' and 'Other'. The 'Profile' tab is active, showing a table with the following data:

Full Name	Pascarelli, Luigi Andrea	Main Affiliation	test
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Overlaid on the page is a 'Claim Researcher Page' modal dialog box. It contains the following text: 'Check the encrypted string of this email, put the correct string in the box below and click "go" to validate the email and claim this profile.' Below this, it shows 'Emails: l.pascarelli@unipi.it, c.pascarelli@unipi.it' and a text input field with a green 'Go' button. There is also a section for 'Login via ORCID to claim this profile:' with an 'ORCID Login' button featuring the ORCID logo. A 'Close' button is located at the bottom right of the modal.

Claim a researcher profile

- If a researcher profile is not linked to a DSpace Eperson, there are two potential ways to claim the profile:
 - If the profile has an email, you can guess the email address to get an email with a forgot-password link. Then a new account with such email will be created and linked to the researcher profile
 - If the profile has an ORCID, you can simply login via ORCID to prove that you are the owner of the profile
- Automatic claiming of existing profiles is performed by the system at login time using the ORCID ID and the email address as a “[post login action](#)”

i Author Identifications

ORCID 0000-0002-2312-0318

Author ID (Scopus) 7004481510

External identifiers can be used to directly address the profile page without knowing the internal CRIS identifier

```
/cris/rp/details.htm?lt=orcid&lv=0000-0002-2312-0318
```

Any type of identifier is allowed (including the ones created locally by the institution – e.g.: staff #)



This allows an easy and direct integration with other institutional sites (staff directory, etc.)

```
/cris/rp/details.htm?lt=<ext_id>&lv=<ext_value>
```

Configuration of the ORCID API-KEY

- Public or Member API?
 - Public: login, claim, search of ORCID registry, pull of public information during researcher profile creation
 - Member API: write to the ORCID registry, access limited information on single researchers
- Production or sandbox environment?
 - Sandbox: you can test the member API even though you are not yet a member, including Premium services (webhooks reserved to national agreements – not used by DSpace-CRIS so far). You can create multiple “user” accounts to facilitate testing
 - Production: you can conduct limited test involving volunteer real users

Environment configuration

All is set in the [authentication-oaut.cfg](#) (via build.properties / local.cfg)

- API endpoints
 - orcid-api-url
 - application-authorize-url
 - application-token-url
- Authorized Scopes (application-client-scope)
 - /authenticate /orcid-profile/read-limited /orcid-bio/update /orcid-works/create /orcid-works/update /funding/create /funding/update /activities/update
- Client credentials
 - application-client-id
 - application-client-secret
 - application-redirect-uri (you can use fake hosts entry to simulate production URL)

Thanks for your attention!

euroCRIS
Current Research Information Systems



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