The Research Information Management System Landscape

Pablo de Castro
euroCRIS Secretary
Open Access Advocacy Librarian
University of Strathclyde
pablo.de-castro@strath.ac.uk
http://orcid.org/0000-0001-6300-1033
Index for today’s talk

— What Current Research Information Systems (CRIS) are (and what they’re not)
— Are CRISs and RIM Systems the same thing?
— An attempt to map the CRIS landscape
— Types of CRIS and models for their implementation
— CRIS systems and VIVO
Current research information system

A current research information system (CRIS) is a database or other information system to store, manage and exchange contextual metadata for the research activity funded by a research funder or conducted at a research-performing organisation (or aggregation thereof).\(^1\)

CRIS systems are also known as Research Information Management or RIM Systems (RIMS).\(^2\)\(^3\)

Features

The data model underpinning a CRIS relies on a set of basic entities as defined by the Common European Research Information Format (CERIF) model maintained by the non-profit organisation euroCRIS.

The links connecting these entities provide a standardised semantic layer that provides consistency to the data model. The basic CERIF entities are people, organisations, projects and outputs (publications, research data, patents). Further second-level entities in the comprehensive snapshot of research provided by CERIF are for instance funding, research facilities and equipment or skills.

https://en.wikipedia.org/wiki/Current_research_information_system
... and what they’re *not*

- not a publications manager
- not a collection of Excel files
- not a social research platform
- not a repository
  - Unless sufficiently populated, meaning they cover the right entities

https://www.4science.it/dspace-cris/
System "E-theses of the University of Montenegro" is assigned for search and download of doctoral dissertations from the University of Montenegro. It is a part of the Digital repository of the University of Montenegro – PHAIDRA, system for indexing and archiving of scientific and professional papers. According to copyright policy, the repository contains only dissertations with signed statements in which the candidate authorizes the university library to upload his dissertation in Digital repository and indicates license conditions. Dissertations are searchable within "E-theses" or within the PHAIDRA.

### LATEST THESSES

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<th>Author</th>
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<tr>
<td></td>
<td>Diverzitet i ekologija terestričnih Parsitengona (Acar: Prostigmata) Crne Gore</td>
<td>Šundić, Miloje</td>
<td>Prirodno-matematički fakultet</td>
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<td>Analiza algoritama za rekonstrukciju signala riječkih u Hermitskom i Furljeovom transformacionom domenu</td>
<td>Brajović, Miloš</td>
<td>Elektrotehnički fakultet</td>
<td>2019</td>
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<td>Prirodno-matematički fakultet</td>
<td>2019</td>
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[https://phaidra.cis.ac.me](https://phaidra.cis.ac.me)
## New Library Services at Western Balkan universities

<table>
<thead>
<tr>
<th>Naziv projekta / Title</th>
<th>New Library Services at Western Balkan universities</th>
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<tr>
<td>Referentni broj / Reference number</td>
<td>158764-TEMPUS-RS-TEMPUS-JPRG</td>
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<td>Godina projekta / Project year</td>
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<tr>
<td>Trajanje u godinama / Duration in years</td>
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<td>Područje / Scope</td>
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</tr>
<tr>
<td>Tip projekta / Type</td>
<td>Tempus Joint project - Governance Reform</td>
</tr>
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</table>

The aim of the project submitted by University library of Belgrade, University Library of Kragujevac, University library of Niš, University library of Montenegro, University library of Sarajevo and University library of Tuzla is to ensure modernization of the existing university library networks, to establish new Web based library services and institutional repositories and to implement European standards in university learning environment. During the project period initiatives (three activities are prior to be conducted in order to improve the whole range of...
A new version of the E-CRIS.CG V 3.2 software has been installed in which the display of search results in the JSON format was added. At the same time, the web presentations of researchers, organisations, groups and projects now also include the display of all publicly accessible data in the JSON format.
### Fundings

For:  

Start a new search

Add Filters

Results 1-50 of 271 (Search time: 0.002 seconds).

Results/Page: 50  |  Sorted by: Relevance

#### Projects

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<td></td>
<td></td>
<td></td>
<td>28-02-2011</td>
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<tr>
<td>ArcLand</td>
<td></td>
<td></td>
<td></td>
<td>23-12-2016</td>
</tr>
</tbody>
</table>
Open Data for Smart Cities
Innovate UK award to SusMobil Limited and Grants Team

Bringing the Social City to the Smart City
ESRC award to University of Leeds and Alison Jane Heppenstall

Innovative 5G services for Smart Vertical Cities
Innovate UK award to Trusted Renewables Ltd and Colin Mallett

Nottingham Smart City Information Model (SCIM)

https://gtr.ukri.org/
UK Research and Innovation

Data Analytics for Future Cities

Lead Research Organisation: University of Strathclyde
Department Name: Mathematics and Statistics

Organisations

University of Strathclyde, United Kingdom (Lead Research Organisation)
Bloom Agency, Leeds (Project Partner)
SotRail Railways Limited (Project Partner)
Capita (Project Partner)
Siemens Public Limited Company, United Kingdom (Project Partner)
CountingLab Ltd (Project Partner)
University of Edinburgh, United Kingdom (Fellow)

Publications

Arrigo F (2018) On the exponential generating function for non-backtracking walks in Linear Algebra and its Applications
Arrigo F (2017) Sparse matrix computations for dynamic network centrality in Applied network science

https://gtr.ukri.org/
Are CRISs and RIM systems the same thing?

October 26, 2014 dempsey

It has been interesting watching Research Information Management or RIM emerge as a new service category in the last couple of years. RIM is supported by a particular system category, the Research Information Management System (RIMs), sometimes referred to by an earlier name, the CRIS (Current Research Information System).

For reasons discussed below, this area has been more prominent outside the US, but interest is also now growing in the US. See for example, the mention of RIMs in the Library FY15

http://orweblog.oclc.org/research-information-management-systems-a-new-service-category/
Are CRISs and RIM systems the same thing?

Research Information Management: Defining RIM and the Library’s Role

by Rebecca Bryant, Anna Clements, Carol Feltes, David Groenewegen, Simon Huggard, Holly Mercer, Roxanne Missingham, Maliaca Oxnam, Anne Rauh, and John Wright

Abstract:

Research information management (RIM) is the aggregation, curation, and utilization of information about research and is emerging as an area of increasing interest and relevance in libraries. RIM intersects with many aspects of traditional library services in discovery, dissemination, and analysis of scholarly activities, and does so through the nexus of data systems, faculty workflows, and institutional partners. RIM adoption offers libraries opportunities to support institutional and researcher goals.

RIM systems are valuable to research institutions because they combine the local with the global, providing opportunities for new insights at the departmental, faculty/college, and institutional level, as well as the potential for regional, national, and transnational sharing and benchmarking. They can also tell a story about major research issues such as impact and collaboration, and also support reputation management for the institution and its researchers.

Are CRISs and RIM systems really the same thing?


Introduction

A position paper by the Online Computer Library Center defines Research Information Management Systems (RIMSs) as information systems used to “collect and store metadata on research activities and outputs such as researchers and their affiliations; publications, data sets, and patents; grants and projects; academic service and honors; media reports; and statements of impact” (Bryant et al., 2017, p. 6). Curating research metadata alone, however, may not be as useful to researchers as curating both metadata and the content the metadata represent in an integrated way (Dempsey, 2014; Hey, Tansley, & Tolle, 2009; Palmer, 2013; Tate, 2012). Hence, we define RIMSs as types of information systems that manage and provide access to researchers’ authored content and identity information and related services (Stvilia, Wu, & Lee, 2018a). Publishers, libraries, universities, search engines, and content aggregators have created many different RIMSs, the scope of which may vary. They can be global (e.g., ResearchGate, Google Scholar, Mendeley), national (e.g., NARCIS, researchmap), statewide (e.g., Florida ExpertNet, REACH NC), disciplinary (e.g., DIRECT2Experts), and institutional (e.g., Scholars@TAMU, Experts@Syracuse, Faculty Expertise and Advancement System at Florida State University). RIMSs are essential for sharing, grouping, linking, aggregating, and retrieving scholarship; evaluating the research productivity and impact of individuals, groups, and institutions; identifying potential collaborators, expertise, and new technologies;
Are CRISs and RIM systems *really* the same thing?


Toward a metadata model for research information management systems

Dong Joon Lee, Besiki Stvilia, Shuheng Wu
Library Hi Tech
ISSN: 0737-8831
Publication date: 13 June 2018

Abstract

Purpose

The purpose of this paper is to examine the relationships between researcher characteristics and their use of metadata in their ResearchGate profiles.

Design/methodology/approach

This paper reports on one part of a larger study that examined researchers’ use of and engagement with research information management systems (RIMs). The study’s design included qualitative, semi-structured interviews with 15 researchers and a survey completed by 412 researchers. Detailed reports of findings from the interviews and survey can be found...
Quality Issues of CRIS Data: An Exploratory Investigation with Universities from Twelve Countries

by Otmane Azeroual 1,2,3,* and Joachim Schöpfel 4

1 German Center for Higher Education Research and Science Studies (DZHW), 10117 Berlin, Germany
2 Institute for Technical and Business Information Systems—Database Research Group, Otto von Guericke University Magdeburg, 39106 Magdeburg, Germany
3 Department of Computer Science and Engineering, University of Applied Science—HTW Berlin, 12459 Berlin, Germany
4 GERiiCO Laboratory, University of Lille, 59653 Villeneuve-d'Ascq, France
* Author to whom correspondence should be addressed.

References

An attempt to map the CRIS landscape

https://dspacecris.eurocris.org/cris/explore/dris
A *community-driven* attempt to map the CRIS landscape

**DRIS: Directory of Research Information Systems**

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type:</td>
<td>CRIS type. Possible values: institutional, funder, regional, national, international, aggregation, other</td>
</tr>
<tr>
<td>Organisation:</td>
<td>Organisation served by the CRIS or running the CRIS</td>
</tr>
<tr>
<td>Name:</td>
<td>Name of the CRIS. If there’s also an acronym, it can be added in brackets</td>
</tr>
<tr>
<td>Platform:</td>
<td>CRIS solution. Possible values are in-house-built, Pure, Converis, Symplectic Elements, DSpace-CRIS, Haplo, Worktribe, etc. Details may be added to complete the description for an in-house-built platform, eg “In-house-built (Java/Webservices)”</td>
</tr>
<tr>
<td>Status:</td>
<td>CRIS status. Possible values: operational, under construction</td>
</tr>
<tr>
<td>URL:</td>
<td>URL for an open CRIS portal, eg <a href="https://www.researchportal.be/en">https://www.researchportal.be/en</a>. If the CRIS has no open portal, then a URL may be used that provides info on the system itself such as <a href="https://researchsupport.admin.ox.ac.uk/reporting/symplectic">https://researchsupport.admin.ox.ac.uk/reporting/symplectic</a></td>
</tr>
</tbody>
</table>
There was wide participation from the community, and we collected 84 full responses from 20 different countries.

The two main questions the Survey tried to answer were: are CRISs gradually replacing IRs? Are the two systems overlapping in their functionalities? From the results we have collected, both questions seem to get a negative answer. The two systems are clearly complementary: while IRs are the preferred choice for managing research publications and dissertations and thesis, CRISs are regularly chosen for managing the institutional research information as a whole including metadata for research papers.
euroCRIS: mapping the RIM landscape (2018)

Survey on Research Information Management Practices

OCLC Research and euroCRIS have been working collaboratively on an international Survey on Research Information Management Practices.

Survey goals

This survey will help us understand and report on the state of RIM activities worldwide, and it seeks answers to the following questions:

- Why have institutions adopted—or are considering adopting—RIM infrastructures?
- What are the principal drivers?
- How are institutions using RIM functionality? What are the principal uses?
- Who are institutional stakeholders, and what, in particular, is the role of libraries?
- What processes and systems are in use? How do they interoperate with internal and external systems? What is the scope?
- What are regional and international differences in drivers, uses, and processes?

When will the results be published?

- The survey is now closed and survey results will be published in 2018 as an OCLC Research report and made openly available to the community.
- Survey data will be published CC-BY.

http://oc.lc/rim
RIM survey report

Practices and Patterns in Research Information Management: Findings from a Global Survey

Rebecca Bryant
OCLC Research

Anna Clements
University of St Andrews and euroCRIS

Pablo de Castro
University of Strathclyde and euroCRIS

Joanne Cantrell
OCLC

Annette Dortmund
OCLC

Jan Fransen
University of Minnesota, Twin Cities

Peggy Gallagher
OCLC

Michele Mennielli
DuraSpace and euroCRIS
Survey goals and scope

In our survey, we explored some key areas of interest, each with regional distinctions, where applicable and possible, including:

- the status of RIM system implementations, proprietary and open source solutions in use, and levels of satisfaction with systems
- the incentives for pursuing RIM and important functions of RIM
- the use of RIM systems as a scholarly communications repository
- the roles of institutional stakeholders, including the library
- the growing importance of interoperability and integration with internal and external systems, and the adoption of persistent identifiers, standards, and vocabularies

OCLC Research and euroCRIS plan to repeat this survey in future years, developing longitudinal data and knowledge about evolving practices in order to inform the research community about the changing goals, purposes, and scope of RIM practices. The survey dataset is published and available CC-BY as a companion to this report.
The RIM landscape: not just “institutions”

- National CRISs
- Regional CRISs
- Funders’ CRISs
- CRIS Aggregations
- Disciplinary/Subject-specific CRISs
- International CRISs
- Institutional CRISs
- Vendor CRISs
- OSS CRISs
Implementation models

- Parallel development of institutional and national CRISs, former tend to be quicker
- Centralised administrations tend to favour national systems with central reporting
- System interoperability underpins any implementation model
- European countries with national/regional CRISs: NO, NL, EE, PT, CZ, SK, PL, SI, HU, BE, ES
- Certain solutions use *same system* at an institutional and a national level
A model National CRIS: Norway

SweCRIS: A National/Funders’ CRIS

Database with grant decisions for 13 research funding bodies

SweCRIS in brief

National collaboration
SweCRIS contains data on grant decisions from 13 Swedish funding bodies and EU.

Export - open data
Search, filter and select the data you want to reuse for your own analysis.

SweCRIS is growing
When more funding bodies deliver decisions, the database expands. Please Contact us!

https://www.swecris.se/en_us/
SK CRIS: Slovak National CRIS

https://www.skcris.sk/portal/home
NordRIS: [proposal for] international CRIS

Proposal of a Nordic collaboration project: Nordic Research Information System (NordRIS)

Nordic Research Information System (NordRIS)

Integrated data and analysis on publications to support responsible research evaluation, statistics and science policy in the Nordic countries

https://www.uhr.no/
The ‘silo’ issue (at multiple levels)

**Title:** Let's Talk : Interoperability between University CRIS/IR and Researchfish – a case study from the UK

**Authors:**
- Clements, Anna
- Viney, Ian
- Reddick, Gavin
- McCutcheon, Valerie
- Macandrew, Hamish
- Toon, James
- McArdle, Ian
- Collet, Sophie
- Wastl, Jürgen

**Keywords:**
- research information management
- system interoperability
- current research information systems
- researchfish
- research funders
- ORCID

**Issue Date:** 9-Jun-2016

**Publisher:** euroCRIS

Procedia Computer Science 106: 220-231 (2017)

**Conference:** CRIS2016 – St Andrews

**Abstract:**
Research funders and research organisations both require feedback on the progress, productivity and quality of the research they support. This information originates with researchers, but may be captured in a variety of systems including University CRIS/IR and funder systems. In 2014 all 7 national Research Councils (collectively referred to as RCUK) implemented a harmonised approach to the collection of research output data currently supported by Researchfish Ltd (referred to as the Researchfish® system). In 2016 this process is gathering feedback from over

http://hdl.handle.net/11366/492
Where are researchers in all this?

http://wheatis.org/
Where are researchers in all this?

WheatVIVO

The Wheat Initiative is developing an open-access web portal that aims to provide information regarding wheat researchers and international projects.

The WheatVIVO portal will facilitate access to information concerning researchers and research projects amongst the global public-private wheat community. This web portal will be a useful tool for researchers to search for partners in order to develop collaborations. WheatVIVO can also be used by students and post-docs to identify labs in which they would like to work, as well as by policy makers and funding agencies to better understand research priorities in different countries.

To develop this portal, the Wheat Initiative has chosen the VIVO research-focused discovery tool, which is already used by a number of prominent universities and research organisations.

https://www.wheatinitiative.org/wheatvivo
CRIS systems and VIVO
(European) CRIS systems and VIVO

— VIVO as ‘public face’ for CRISs – system interoperability at the core
— Converis, HISinOne (Germany), Pure (Netherlands), SIGMA (Spain), PT-CRIS (Portugal)
— Siloed landscape – euroCRIS aiming to foster discussion and interoperability
EUROCRIS MEMBERSHIP MEETING

Taking steps towards an research information ecosystem: national standards and the role of identifiers and subject classification

November 18-20, 2019 at University of Münster, Germany

77 DAYS 13 HOURS 37 MINUTES 52 SECONDS

https://eurocris.uni-muenster.de/
Thanks!

Questions?

Pablo de Castro
euroCRIS Secretary

Open Access Advocacy Librarian
University of Strathclyde
pablo.de-castro@strath.ac.uk

http://orcid.org/0000-0001-6300-1033