DABAR & HRČAK: Croatian Academic and Research Repository Infrastructure

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Incentives and Rewards to engage with Open Science activities

Dubrovnik, 13 September 2017
SRCE – University of Zagreb, University Computing Centre

- main computing centre and the architect of the e-infrastructure

- covering both the University of Zagreb and the whole research and high education system
<table>
<thead>
<tr>
<th>Layers of e-Infrastructure and some of their desired characteristics</th>
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<tbody>
<tr>
<td><strong>Information</strong></td>
</tr>
<tr>
<td>Collections: data, work-flows, publications, learning materials, etc.</td>
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<tr>
<td><strong>Repository services</strong></td>
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<tr>
<td>Deposit, application software, annotation, visualisation, search, etc</td>
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<tr>
<td><strong>Management of Repositories</strong></td>
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<td>Repository management, curation, physical security, etc</td>
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<tr>
<td><strong>Management of Access</strong></td>
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<tr>
<td>Authentication, authorisation, logical security, federation, portals etc</td>
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<tr>
<td><strong>Processing, Computation</strong></td>
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<tr>
<td>Platform software, Distributed computing, Grids, etc</td>
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<tr>
<td><strong>Physical infrastructure</strong></td>
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<tr>
<td>Networks, computing, HPC, physical storage, etc</td>
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<tr>
<th>Authenticity Quality Longevity</th>
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<tbody>
<tr>
<td>Ease of use Availability Reliability</td>
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<tr>
<td>Trusted Open Well managed</td>
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<tr>
<td>Standardised Stable Flexible</td>
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<tr>
<td>Transparent Responsive Informed</td>
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<tr>
<td>Available Scaleable Reliable</td>
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https://www.slideshare.net/KnowledgeExchange/e-infrastructure-for-oa/6
“Data layer”: repositories, archives, portals…
HRČAK - Portal of Scientific Journals of Croatia

HiD / SRCE / MZO

Project in 2004/2005 with 2 goals:

- Encourage editors of Croatian scientific and profesional journals to publish in Open Access
- Develop a platform that will enable journal editors to publish and end users to browse and search articles on one web site

Production: February 2006
Current state

440+ journals
171,200+ OA articles
40,500+ visits daily

editorial process: Open Journal System (OJS)
Interoperability & visibility

- OAI-PMH, KBART, DOAJ API, HighWire Press…
Interoperability & unique identifiers

ORCID

- 8,000+ authors are using their ORCID iDs
- 18,500+ connections between papers and ORCID

Funder / project information

- OpenAIRE (FP7, H2020, WelcomeTrust…)
- PDB@IRB (MZO, HRZZ)
Advanced format

XML format (JATS - Journal Article Tag Suite)

• content mining
• format migration
• presentation (references, tables,…)
DABAR - Digital Acedemic Archives and Repositories

June 2014.

Goals

• National infrastructure for digital repositories
  • scalable, interoperable, sustainable, flexible and suited for long term preservation
  • SaaS

• Community (working groups)
  • information needs, application profiles, controlled vocabularies, education and user support

• OA promotion
• development
• multisite

+ Jenkins, Selenium, Git, ...
Result: DABAR - scalable national infrastructure

Production: August 2015.

115 digital repositories
- 10 universities
- 2 national repositories
Results: Stored and published digital objects

- 42,000+ digital objects
- 18,000+ OA
Results: Community

Coordination committee + working groups

March 2016. - memorandum of understanding:

• SRCE
• Ruđer Bošković Institute
• University of Zagreb School of Medicine
• University of Zagreb Faculty of Humanities and Social Sciences
• National and University Library in Zagreb

+ other institutions

Working groups (8 + 2):

• Theses and dissertations
• Scientific and related works
• Image, audio and video content
• Interoperability
• Long-term preservation
• User functionality
• Copyright
• Education & Support
• Research Data
• Educational Resources
Results: 4+1 types of digital objects

- Thesis
- Dissertations
- Articles published in journals
- Artistic works (photographs)
Roadmap

Support for additional objects (digital asset):

- **Conference papers** and presentations
- **Book chapters** and books
- Artisctic works (**audio**, video)
- Research data
- Educational resources
- ...

DABAR & HRČAK : Croatian A & R Repository Infrastructure
Results: Interoperability

DABAR’s integration with national and global e-infrastructure

DABAR & HRČAK: Croatian A & R Repository Infrastructure
Results: rich metadata vs efficiency

Croatian Higher Education Information System (ISVU)
Registry of Study Programs
AAI@EduHr
URN:NBN

HRČAK (OAI-PMH, KBART)
CROSBI (Web/MODS)
DOI/CrossRef (API)
Sherpa / ROMEO
AAI@EduHr
URN:NBN
Registry of Scientists
PubMed Central (API)
Conclusion?

Institutions – DABAR
Journal editors – HRČAK

Challenges?
• support for research data
  • and research tools
  • volume & complexity?
  • Croatian scientific and educational cloud (HR-ZOO)

• registries and APIs > CRIS
Thank You!

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