DABAR & HRČAK: Croatian Academic and Research Repository Infrastructure

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SRCE - University of Zagreb, University Computing Centre

Incentives and Rewards to engage with Open Science activities





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





Layers of e-Infrastructure and some of their desired characteristics

Information

Collections data, work-flows, publications, learning materials, etc.

Repository services

Deposit, application software, annotation, visualisation, search, etc

Management of Repositories

Repository management, curation, physical security, etc.

Management of Access

Authentication, authorisation, logical security, federation, portals etc

Processing, Computation

Platform software, Distributed computing, Grids, etc.

Physical infrastructure

Networks, computing, HPC, physical storage, etc

Authenticity Quality Longevity

Ease of use Availability Reliability

Trusted Open Well managed

Standardised Stable Flexible

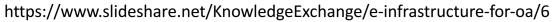
Transparent Responsive Informer

Available
Scaleable
Reliable











"Data layer": repositories, archives, portals...









HRČAK - Portal of Scientific Journals of Croatia

HiD / SRCE / MZO



Project in 2004/2005 with 2 goals:

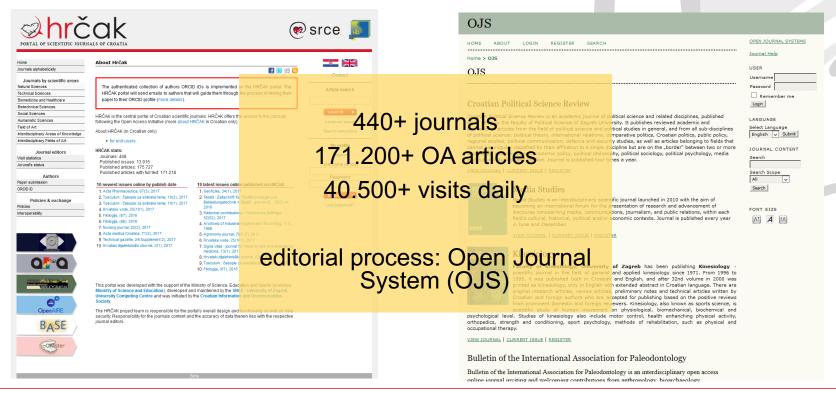
- Encourage editors of Croatian scientific and profesional journals to publish in Open Access
- Develop a platform that will enable journal editors to publish and end users to browse and search articles on one web site

Production: February 2006





Current state







Interoperability & visibility

OAI-PMH, KBART, DOAJ API, HighWire Press...





















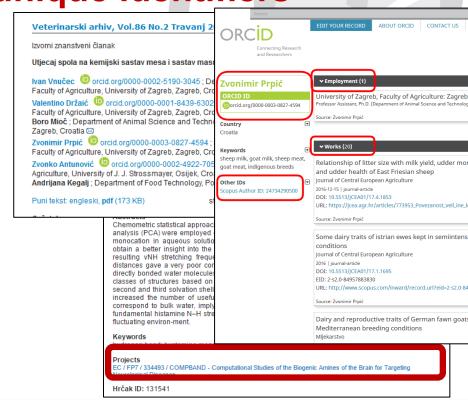
Interoperability & unique identifiers

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

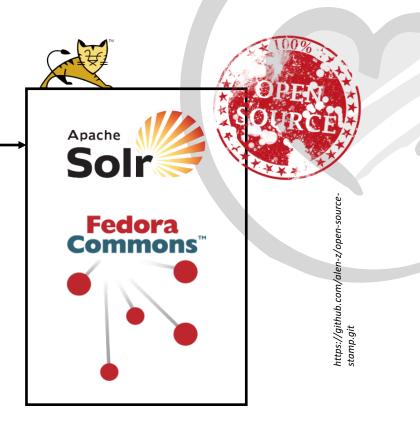




Drupal™

- developement
- multisite





+ Jenkins, Selenium, Git, ...



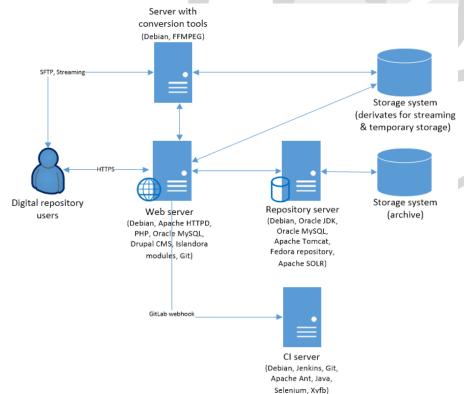


Result: DABAR - scalable national infrastructure

Production: August 2015.

115 digital repositories

- 10 universities
- 2 national repositories

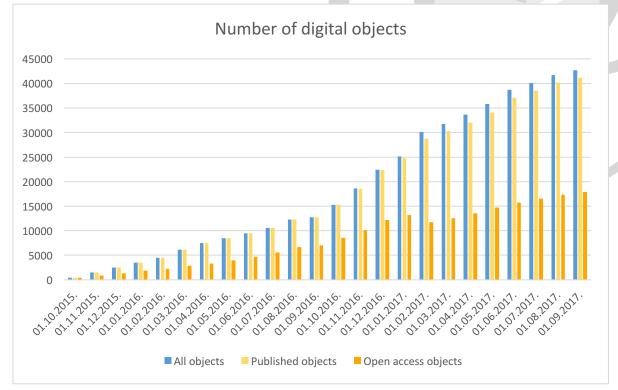






Results: Stored and published digital objects

- 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 disertations
- 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



Jadrija





Support for additional objects (digital asset):

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







Results: Interoperability

Repository managers **DABAR** Institutional depositors End users Web GUI Object management Storing, Updating, Deleting REST API 100+ repositories Information providers Sharing and dissemination https://repozitorii.ntfos.hr https://repozitorij.unipu.hr https://repozitorij.mef.unizg.hr OAI-PMH hrčak Portal of Scientific Journals of Croatia CROSBI Discovery services Institutional Identity and Croatian Scientific Bibliography identifier services information systems and repositories **F** @EduHr OpenAIRE Crossref of science and higher education in Croatia Google SHERPA/RoMEO Iniversity of Zagreb, Faculty of Organization and Informatics Information URN:NBN service ISVU · National and University Library in Zagreb Archives Aggregator Information System Registry of study programs and Social Sciences Repository **OpenDOAR CURRENT STATUS** EBSCO, ProQuest CroRIS Summon... Croatian Research Registry of scientists PubMed Central PMC

DABAR's integration with national and global e-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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www.srce.unizg.hr/en

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