Distributed Open Access Reference Citations Service

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Introduction

• Developed as back-end-service
• Aggregating meta-data from institutional repositories
• Enriching meta-data
• Discovering the citation-graph
• CSN as first test-community
• Runtime: 18 months (DFG-Funded)
Project partners

• Volker Mellert
  – Carl von Ossietzky University, Oldenburg (CvO)

• Eberhard R. Hilf
  – Institute für Science Networking Oldenburg GmbH (ISN)

• Peter Schirmbacher and Frank Havemann
  – Berlin school for information and library science (IBI), Humboldt-University Berlin

• Wolfgang Christen
  – Institute of Chemistry (IfC), Humboldt-University Berlin
Aims and concept

- Integrating and developing tools for literature management
  - Exchange of meta-data
  - Enrich of meta-data
- Interactive visualization of document-relations
  - Reference-analysis
Embedding into the Network

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Cooperation with OANetwork

- OAN as user-interface and data-provider
- Usage of OAN technology
  - Fulltext-crawler
  - Dublicate-checker
  - Classificator
- Exchange of metadata between OAN and DOARC
Content relation of documents

- Field-specific definition
  - Identifying field-specific word-combinations
  - Building field-specific fingerprints
  - Assigning new documents to fields

- Field-specific thesaurus
  - Usage of lexical analysis
  - Identifying thematically similar documents
Cooperation with AuthorClaim.org

- AuthorClaim database is synced with DOARC
  - Small set of meta-data (title, authors, url)
  - Information about claimed and unclaimed documents
- Information of claimed and unclaimed documents used in user-interface
  - Encourage authors to use AuthorClaim

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Claiming of authorship using ACIS

• **Usage of the Author Contribution Information System (ACIS)**
  – Author registers to the system
  – Sets up a list of acronyms
  – Claims affiliation with institutions
  – Gets displayed a list of possible publications
  – Claims/rejects the listed papers

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Benefits

- Added value for authors by claiming their publications
- Increasing the data-space on both sides
  - More documents for authors to claim
  - More documents for readers to find
- Increasing the quality of meta-data
Citation Networking

Size of nodes = number of citings
Color of nodes= relevance
Strength of link = similarity

http://doarc.projects.isn-oldenburg.de

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Network-graphs of papers

• Different dimensions of probability
  – Bibliographic coupling
  – Co-citing
  – Lexical coupling

• Different ways to visualize the similarity
  – Network-graphs
  – Sortable lists

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Data import and coverage

- Data im-/export in different ways
  - OAI-PMH
  - BibTeX/EndNote
  - Author-Publication-Lists
  - Proprietary Provider-APIs
- Get the biggest possible set of meta-data
- Aggregate and enrich this meta-data
Aims of DOARC

• Higher usage of OA-documents resulting from better visibility
• Supporting Authors in action
  – Finding thematically relevant publications
  – Simple usage of metadata (Import/Export)
  – OA-publishing with complete meta-data
Author- and user-tools

• Support through the whole writing process
  – Making it easy to find relevant papers
  – Add papers to a reference-list
  – Exporting this reference-list in preferred format
  – Upload the document incl. reference-list
  – Enter further meta-data

• Export own publication-list

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Prospects and future

- Expanding data-space
- Expand from german OA-sources to international sources
- Further enhancing the reference-extraction-tools
• Project-site
  http://www.isn-oldenburg.de/projects/doarc2/
• Contact me
  maune@isn-oldenburg.de
• Our Institute
  http://www.isn-oldenburg.de