Building an All-in-one Service

Extending an existing Open Access Repository to a complete Research Information System

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Open Repositories 2019, Hamburg, Germany
P1D: Convergence of repository and CRIS functions
Outline

1. The Hamburg Open Science Program
2. Where we were in 2017
3. Prototyping: How many Systems?
4. Some Insights on TUHH Open Research
1. Hamburg Open Science: the Program
Hamburg Open Science: 2018-2020
Support for digitization in Hamburg's scientific community

Institutionalized Services
- Current Research Information System
- Open Access Repository
- Research Data Repository

Institutionalized Services
- 2018 Prototyping
- 2019 Go live part 1
- 2020 Go live part 2
Planned System Landscape for Hamburg Open Science

[Diagram showing a network of relationships and processes related to the Hamburg Open Science initiative, including stakeholders like researchers, universities, and enterprises, as well as systems like repositories and digitalization services.]
2. Where we were in 2017
Status TUHH 2017

TU Hamburg:

- Professors: 93
- Scientific staff: 673
- Programmers in the library: 1

DSpace: Open Access Repository TUHH

- Decision for DSpace JSPUI in June 2014
- Migration from OPUS to DSpace JSPUI: February 2015
- Concept research data repository: February 2017
- ORCID Integration via DSpace-CRIS: October 2017

CRIS:

- TeFIS (Own development TUHH)
- No university bibliography
2017: DSpace-CRIS for Everything?

- operational
- planned
- give OSS a try

Open Access Repository
Research Data Repository
Current Research Information
3. Prototyping: How many Systems?
Two Approaches, Four „Prototypes“

Hamburg University
- Thesis Repository: DSpace-CRIS
- RDM System: Invenio/Zenodo
- CRIS: PURE

✓ Three „prototypes“

Hamburg University of Technology
- OA Repository: DSpace-CRIS
- RDM System: DSpace-CRIS
- CRIS: DSpace-CRIS

✓ One „prototype“
The Single System Approach

Hamburg University of Technology

- OA Repository: DSpace-CRIS
- RDM System: DSpace-CRIS
- CRIS: DSpace-CRIS

Advantages

- Only one system needs to be maintained
- Common entity base for all components
- Better usability by providing one single central service for each use case

Disadvantages

- Conflicts for Use Cases
## Conflicts

### Having a single system containing three components is good, but...

- a universal approach to handle all of the entity types is required (for example not possible to create projects on demand in the OA collection, but not in the CRIS-context)
- a universal login approach is required (do we need external logins?)
- CRIS is University centric, while OA and RDM are content centric

<table>
<thead>
<tr>
<th></th>
<th>OA Repository</th>
<th>RDM Repository</th>
<th>CRIS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Researcher</strong></td>
<td>Focus on all authors</td>
<td>Focus on all researchers involved</td>
<td>Focus on local researchers</td>
</tr>
<tr>
<td><strong>Orgunits</strong></td>
<td>All institutes / corporates</td>
<td>All institutes / corporates</td>
<td>University’s institutes</td>
</tr>
<tr>
<td><strong>Projects</strong></td>
<td>All projects from publications in the system</td>
<td>All projects from publications in the system</td>
<td>University’s projects</td>
</tr>
<tr>
<td><strong>Fundings</strong></td>
<td>All fundings</td>
<td>All fundings</td>
<td>Only project fundings</td>
</tr>
<tr>
<td><strong>Items</strong></td>
<td>All open</td>
<td>May require access control</td>
<td>Mix</td>
</tr>
<tr>
<td><strong>Login</strong></td>
<td>Any author</td>
<td>Any author</td>
<td>Only University staff</td>
</tr>
<tr>
<td><strong>Archiving</strong></td>
<td>Permanent content</td>
<td>Permanent content</td>
<td>Might be temporary</td>
</tr>
</tbody>
</table>
4. Some Insights on TUHH Open Research
Submission Workflows

Three Collections with different Submission Forms
• Different Metadata Fields
• Different Submission Steps
• Different Handling of DOIs
• Different Handling of Fulltext Files
• Different License Agreements
• Same Submission Workflows, but
• Different Staff involved in Submission Workflows

<table>
<thead>
<tr>
<th>Submission Step</th>
<th>Publications with Fulltext</th>
<th>Publications w/o Fulltext</th>
<th>Research Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metadata</td>
<td>3 pages</td>
<td>3 pages</td>
<td>1 page</td>
</tr>
<tr>
<td>DOI (with Preview)</td>
<td>yes</td>
<td>no</td>
<td>yes</td>
</tr>
<tr>
<td>Upload Option</td>
<td>yes</td>
<td>no</td>
<td>yes</td>
</tr>
<tr>
<td>Embargo Option</td>
<td>yes</td>
<td>no</td>
<td>yes</td>
</tr>
<tr>
<td>License</td>
<td>yes</td>
<td>no</td>
<td>yes</td>
</tr>
<tr>
<td>Workflow</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
</tr>
</tbody>
</table>
Entities used at the TUHH

- Organizational Units (OU)
- Researcher Profile (RP)
- Projects
- Journals
- Events (Conferences)
Researcher Import

Imported Researcher Profiles
• Import from LDAP → each researcher automatically receives a prefilled RP
• Modification options for staff via TUHH contact database
• Regular updates
• Marked as employee
• Option to hide profile (only visible in TUHH intranet)

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Technische Universität Hamburg
open research

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## Researcher Profiles (RP)

- All persons (authors, ...) receive an RP when creating a publication
- Lookup of persons in local database or ORCID
- „Person Type“ qualified by icon colour (No Icon = Private Profile)
- Authenticated ORCiD displayed with icon
Challenges?

Plenty! Here are just some of them:

- Upgrade to DSpace7
- GUI / Usability
- Entity control also for mass imports
- Workflows
- Documentation
- Embedding CRIS content in websites
- Staff council / GDPR
- …

TUHH Open Research: https://tore.tuhh.de

We are happy to discuss your questions

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