A staged path to a fully integrated CRIS & Repository

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haplo.com/repository
Back in 2013...

Built an interesting information management platform and was looking for a practical use for it.

Wanted to support researchers with a Virtual Research Environment.
University of Westminster research management tools to be replaced

<table>
<thead>
<tr>
<th>Graduate School</th>
<th>Ethics</th>
<th>Funding</th>
<th>Repository</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student records</td>
<td>Forms</td>
<td>Sales Force</td>
<td>Legacy repo</td>
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<tr>
<td>Forms</td>
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<td>Emails</td>
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<td>Spreadsheets</td>
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<td>Spreadsheets</td>
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</tbody>
</table>
Identifying the many different record types

A example selection
Start with a data model map
Metadata capabilities (1)

- **Pervasive multi-values**
  - All attributes are multi-value, and using multi-values works with all Haplo features.

- **Qualifiers**
  - All attributes can be qualified (like Fully Qualified Dublin Core).

- **Links as primary data type**
  - Model every "noun" as a type, then link from records instead of using free text. Eg Authors have their own record, and Outputs link to authors. Allows 'data once' (eg ORCiD iD on Author goes on all outputs) and easy querying. Used as much as possible, eg Projects, Publishers, Funders, Journals, Licenses, Subject, Open Access, File access levels, ...
Metadata capabilities (2)

- **Hierarchy support for links**
  - Enables taxonomies, organisational structure, etc.

- **Pluggable data types**
  - Some data types need special logic and display. Plugins can define special types, eg DOI, Author Citation, ORCiD iD, ...

- **Computed attributes**
  - Derive metadata from other records in the CRIS, using custom logic. Eg Department is computed from department attribute of author at time of deposit.

- **Aliasing attributes**
  - Use same underlying attribute for consistency and discoverability, but display and metadata crosswalk to appropriate name for the output. Eg Author (text) aliases to Creator (non-text).
Permissions

• Many users
• Rights apply at organisation unit, project, ...
• Change over time
• Label records
• Roles determined by metadata
Prepare files for release

Select files for release from those that have been previously prepared, and/or upload newly prepared files appropriate for this application's audience.

<table>
<thead>
<tr>
<th>Select</th>
<th>File</th>
<th>Audience</th>
<th>Action</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>External</td>
<td>Anonymised</td>
<td>Fully anonymised dataset.</td>
</tr>
</tbody>
</table>

Newly prepared files

Drag files here or choose file...

**Suitable for** *

--- select ---

**Preparation action taken** *

--- select ---

**Comment**

Submit
Building blocks for a CRIS + Repository

1. Data model
2. Workflows
3. Permissions
4. User experience & interface
Haplo Repository Structure

- Public Interface
- Internal Interface
- Profiles
- Citations
- EThOS
- OAI-PMH
- Ingest Workflow
- Practice Based Workflows & Schema
- Data Management Schema & Workflows
- API to Preservation System
- Restricted Files
- Core Repository Schema
- Ingest Workflow
- Internal UI
- Single Sign On

Easy to configure

- Embedded in every instance

Application Layer

Repository Layer

Higher Education Layer

Platform Layer

Security
Permissions
Version Control
Web Publisher
Object Store

Data Feed

Haplo
Timeline of University of Westminster project

- **2013**: Requirements
- **2014**: PhD Manager
- **2015**: Ethics Monitor
- **2016**: Hybrid Repository
- **2017**: All Haplo Repository
- **2018**:
Moving repository: benefit v risk

Benefits

- Self-deposit
- User engagement
- Workflow support
- Better support for practice-based research
- Easier REF submission
- Control over public interface design
- Improved author identification
- One supplier

Risk

- Not being able to submit REF return
- Moving away from a repository system ‘trusted by all universities’
- Loss of access to EPrints community and developments
- Drop in Google rankings
Increase in self-deposit after moving to hybrid repository

- Total number of outputs
- Full-text deposit

Self-deposit via VRE

UK REF OA Policy
Challenges supporting a hybrid repository

- Limited metadata model
- Dated public interface
- Couldn’t take advantage of the potential to better support practice-based research
- Couldn’t move forward with support data management
Moving to an all-Haplo Repository

Jenny Evans, University of Westminster
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Building a business case to move towards an all Haplo-Repository

- Success, in other areas of VRE research administration built credibility
- Haplo continued to extend repository functionality
- Internal university discussions focussed on mitigating risks - and the risks of not moving were highlighted
- More university clients were choosing Haplo which helped to build confidence
WestminsterResearch

The online repository of research outputs from the University of Westminster’s academic community.

London Bloomsbury.

Reading Experimental Writing

Collaborating with Claude Cahun: Between

WestminsterResearch makes information about thousands of publications (many accompanied by the full text or a link to the full text on the publishers website) available through open access.

If you would like to know more about WestminsterResearch or are interested in submitting research outputs, please see: Open Access: WestminsterResearch or contact repository@westminster.ac.uk.
‘You don’t know what nights are like?’ – collection of public art projects

Tabrizian, M. 2016. ‘You don’t know what nights are like?’ – collection of public art projects.

This is a series of major billboard projects commissioned by the ‘Art on the Underground’ (initially as a response to the launch of the night trains), entitled ‘You don’t know what nights are like?’. They focus on night - time workers, with a number of interviews made with those who work between 8 to 12 hour night shifts -some have been doing so for over 16 years.

Using ‘fragments’ of their stories, the text attempts to depict ‘interiority’, i.e. the interior emotional states of the individuals, their resilience, and the sense of being on the ‘other side’.

The images take a more abstract approach to the portrayal of the people who live on the margin and remain invisible. Set early in the morning, a lone figure is walking in a deserted landscape, almost rural with overgrown vegetation - and yet, there are street lights, a rubbish bin, and a train line in the background. The gloaming sky is an allegory of transition, of crossing over. The boundary of rural and urban, of day and night, create a landscape of tension.

Total views: 1145
Total downloads: 212
Views this month: 22
Downloads this month: 12
Transforming the University of Westminster Repository

Evans, J., Renner, T. and Tribble, P. 2019. Transforming the University of Westminster Repository.

Collection items

**Keeping Data Safe: how to implement a secure repository**

**Identifying the Different People and Systems Involved and Potential Areas for Risk**

**Implementing a next-gen repository mid-REF cycle...madness or a stroke of genius?**
Evans, J. 2018. Implementing a next-gen repository mid-REF cycle...madness or a stroke of genius? Repository Fringe 2018. Royal Society of Edinburgh, Edinburgh 02 - 03 Jul 2018
Benefits of an All-Haplo Repository and fully integrated CRIS & Repository

- User engagement
- Workflow support
- Better UK REF management
- Improved public interface
- Flexibility to be able to adapt to future requirements more readily
- Single supplier
- Non-text outputs & portfolios
- Datasets
“We have already received our first request using the ‘request a copy’ functionality for a file under temporary embargo. The author was happy to share, but wasn’t aware until she received the request that this was permissible. She now knows she can do this, and also that someone is interested in her work.”

Nina Watts
Open Access and Repository Advisor
University of Westminster
“It is rare that we can deliver a hugely improved user experience whilst making a significant budget saving - this implementation has resulted in both.

This has been a great opportunity to work as a partner with Haplo on developing a cutting edge repository that addresses many of the challenges which the sector faces. ”

Caroline Lloyd
Director, Student and Academic Services
University of Westminster
Looking to the future

- Advantages of integrated research management support in one system
  - Data management planning
  - Reporting
  - REF administration
Thank you

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