Agenda

» Introduction & Research at Risk
» RDM Architecture & Pilot Solution Scope
» Shared Service Requirements
» HEI engagement
» Procurement process
» Project Development process
» Timeline and Next Steps
Realising a robust and sustainable research data management infrastructure and services to enrich UK research.

**Challenge**
There is currently an inefficient and fragmented approach to research data management throughout the UK. This leads to underperformance and cost inefficiencies across universities. There is a real risk to universities in failing to comply with government and funder requirements.

**Who it affects**
- Researchers need to comply with government and funder requirements
- IT directors need to store and manage research data
- Librarians need to ensure other researchers can access the data

**Why it matters**
- Ability to attract and retain researchers
- Reputation of universities can be affected by mismanagement of research data
- Support better research collaboration (internationally)
- Comply with requirements of research funders

**Success criteria**
- Cost effective national brokered infrastructure as a service
- Research outputs discoverable and reusable
- Fewer impediments to doing research
- Research Data Management is business as usual

**Jisc audience**
Which members of Jisc's audience will be most interested?
- Vice-chancellors
- College principals
- Finance directors
- Librarians
- IT directors

**Timescale**
How long until we can expect to see the benefits?
- Quick win, requirements and plan

**Commitment**
Who in the steering group pledged to commit two days of their time?

*Mike Fraser - Director of Infrastructure Services, University of [insert name]*
Researchers shouldn’t need to think (too much!) about Research Data Management

- Provide researchers intuitive, easy functionality to publish and archive their research outputs.
- Provide interoperable systems to allow researchers and institutions to fulfil and go beyond policy requirements and adhere to best practice throughout the RDM lifecycle
What we need

<table>
<thead>
<tr>
<th>Front End/ User Interface</th>
<th>Middle Layer</th>
<th>Storage Layer</th>
<th>Preservation Layer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ingest UI</td>
<td></td>
<td>Access Data Storage</td>
<td>Preservation/ Curation Metadata</td>
</tr>
<tr>
<td>Basic Metadata Entry</td>
<td>Data discovery UI</td>
<td>Access Data Storage</td>
<td>File Format Identification tools</td>
</tr>
<tr>
<td>X</td>
<td>Registry/catalogue search function</td>
<td>Archive Data Storage</td>
<td>File/ media migration / transformation tools</td>
</tr>
<tr>
<td>Data Publication UI</td>
<td>Landing page with DOI, Discovery Metadata, and metrics</td>
<td>Archive Data Storage</td>
<td>Emulation tools</td>
</tr>
<tr>
<td>X</td>
<td></td>
<td></td>
<td>Other Preservation/ Curation tools</td>
</tr>
</tbody>
</table>
Links to R@R Portfolio

Research at risk inputs into RDM shared services pilot

Shares services

- UK research data discovery service
- UK ORCID consortium
- Usage statistics for research data
- Journal research data policy registry
- DMP online

Policy practice and standards

- Funder policy guidance (EPSRC etc.)
- RDM business case and costing
- Research data metadata
- Research data spring prototypes
Shared Service Proposed Stages

» **1st Stage:** Jisc procured and developed beta service with pilot HEI’s

» **2nd Stage:** Jisc delivered RDM Service (agreed via business case)

» **3rd Stage: tbc** - Jisc offer modules or national agreements to fill architecture gaps in existing systems

- Jisc require feedback from the community and will consult at a November event and welcome feedback on published concepts.

- To take these concepts forward volunteer pilot institutions to work up detailed requirements and develop/test the service in partnership will be needed.
» Draft Requirements Document informed by intelligence gathering and current and past projects.

» Requirements to be refined by:
  – HEI and Supplier Consultation Workshops (Nov 2015)
  – Pilot HEI’s (From Jan 2016)
  – Expert Advisory Group (From Oct 2015)

» Inform Operational Requirements Tender Document

» Requirements have been published on Jisc RDM blog and comments welcome
Pilot HEI Engagement

» 6 HEI’s needed to partner with to develop, pilot and test the service

» Already have informal expressions of interest, formal selection process announced this week
  - Looking for a range of institutions based on:
    - size, type of institution
    - types of data
    - degree of RDM readiness
    - current institutional systems
Procurement

» Draft Lots
  - User interface
  - Repository development and management
  - Data exchange and integration
  - Metadata exchange and integration
  - Research data preservation
  - Reporting

» Existing Frameworks and Agreements
  - Data Archiving Framework
  - Cloud Storage
  - Shared Data Centre
  - Futures Framework (Developer Services, RDM and Technical Architecture Consultancy)

» Tender to go out late November/Early December 2015
Procurement Lots

RDM Shared Service: data and metadata transfers between lots and systems

Lot 1: Research Data Repository

Lot 2: User Interface

Lot 3: Metadata Exchange Interface

Lot 4: Data Exchange Interface

Lot 5: Research Data Preservation

Lot 6: Reporting

Storage and Archiving

Data Archiving Framework

Cloud Storage

Local (infinite) Storage

Automated migration: large and offline data not suitable for Web UI

Data Input

Data Transfer

Data Ingest

Metadata Ingest

Discovery

Publication

Internal Institutional Systems (CRIS, IR, etc.)

External Systems (Metrics, ID's, Funders, Scholarly Comm's, etc.)

Processes
Shared Service Development Process

Project Working Group, Research at Risk Co-Design Partners. Jisc Board

Requirements gathering and design
- Requirements Gathering, Consultation and Workshops
- Survey of institutions
- Intelligence Gathering
- Identify Pilot Institutions requirements
- Requirements and functions identified
- Updated User Requirements

Commission/Procure service development and implementation
- Build a team of System Suppliers/Developers

Alpha Development
- Pilot (Alpha) Development
- Pilot (Alpha) Testing

Phase 2: Service Enhancement & Modular shared services:
- Ingest/Publication/Repository Platform Storage
- Long Term Archiving
- Preservation Layer

Research at Risk Results: Metadata, Preservation, Metrics, ORCID

Service Development
- Launch Production
- Shared Service
- User Consultation
- Business Case
- Launch Beta Service
**Milestones 2015**

- **April-August**
  - Gather information and requirements
  - Develop concepts and architecture

- **September**
  - Initial engagement with pilot HEI's
  - Develop procurement approach

- **October**
  - Firm up requirements, approach, design and procurement

- **November**
  - Consult and finalise on requirements and begin procurement process

- **December**
  - First Expert Advisory Group Meeting, Selection of Pilot HEIs

---

**Summary**

10/11/2015

RDM Shared Services timeline
Milestones 2016/17

- Selection of Suppliers
- HEI Requirements gathering

- Contracting with suppliers
- Begin Alpha Development

- Alpha service tested and reviewed
- Beta service launched

- Feedback on Beta Service
- Business Decision go/no go

- If go then transition to production service

January 2016
- Work begins on detailed requirements and technical architecture

February 2016 – April 2017
- Development phase

May 2017 – July 2017
- Refine Alpha Service
- Contact additional early adopter HEI’s and promote Beta Service

August 2017 - September 2017
- Business planning and Begin Business Case
- Market Research and Consultation

October 2017 - December 2017
- Promote service to institutions
- Start on next phases (service enhancement/modular)
We want your feedback...

Thank you!

Email: john.kaye@jisc.ac.uk
Twitter: @JohnPKaye
Blog: http://researchdata.jiscinvolve.org

Except where otherwise noted, this work is licensed under CC-BY-NC-ND