Who we are
Jisc Research Data Services Context
RDSS Context and Vision
RDSS timeline and progress
Data Model & CERIFication Project

Link on https://www.jisc.ac.uk/rd/projects/research-data-shared-service
Jisc is the UK higher, further education and skills sectors’ not-for-profit organisation for digital services and solutions.

We...

Provide trusted advice and practical assistance for universities, colleges and learning providers.

Operate shared digital infrastructure and services.

Negotiate sector-wide deals and conditions with IT vendors and commercial publishers.
The Jisc R&D proposition

The goal is

Developing new national shared technology services

Delivered by

Collaborating across the sector

Facilitated by

Jisc as a national body with a technology focus

Using

Jisc’s co-design innovation process
The futures portfolio consists of three big areas:

1. **Digital capability**
   - Digital leadership
   - Digital launchpad
   - Apprenticeship workforce development

2. **Learning analytics**
   - Analytics academy
   - Analytics labs
   - Qualification verification

3. **Research data shared service**
   - Research data discovery
   - Research data usage metrics
   - Equipment data

**Sub-areas**:
- **App and content store**
- **Playlists**
- **Store services**
- **Curation and remix**
- **Diagnostic tool builder**
- **Learner Analytics Services**
- **Repository and preservation platform**
Alpha site - http://ckan.data.alpha.jisc.ac.uk/
Welcome to IRUSdata-UK

As sharing research data becomes more common, understanding the levels of data use is important to funders, institutions and researchers from both an impact and a financial perspective. Download metrics represent one element of this valuable information. We have been working on identifying reliable ways of recording data downloads, and as part of this work have created the IRUSdataUK pilot, an experimental service (currently in the alpha phase of the release life cycle) based on established Jisc IRUS-UK technology.

IRUSdata-UK: aim

- Enable UK data repositories to create/share/expose usage statistics based on a global standard, COUNTER (projectcounter.org/)
- Statistics are produced on the same basis as scholarly publishers, following the COUNTER Code of Practice for e-Resources
- Raw download usage data is filtered to remove robots and double clicks
- So statistics are: Comparable, Reliable, Trustworthy, Authoritative

You can find out more about IRUSdata-UK by visiting our Jisc Research Data Metrics page.
Key researcher issues drive RDSS functionality

Following input from our Expert Advisory Group, the Research Data Network, funders, and dialogue with global users and vendors, Jisc RDSS will provide the following core researcher functional needs:

- **Filling a gap**: 75% of respondents look first to their institution to preserve their data.
- **Uptake of RDM**: Only 40% of respondents have a Research Data Management plan.
- **Advocacy**: Only 16% of respondents are currently accessing university RDM support services.
- **Metadata**: Only 18% of respondents say they follow established metadata guidelines.
- **Public datasets**: >70% recognise that research is a public good and should be publicly released.
- **Sensitive data**: 41% of respondents have some form of sensitive data.

- **Advise & best practise**
- **Capture & reuse**
- **Preserve**
- **Report**

Source: Jisc DAF Survey results 2016
**Research Data Shared Service Timeline**

### Milestones 2015-18

- **Apr 2015-Dec 2015**
  - Institutional survey
  - HEI and supplier workshops
  - Pilot HEI selection process

- **Jan 2016 – July 2016**
  - Detailed HEI requirements and technical architecture
  - Contracting commences

- **Aug 2016 - June 2017**
  - Development Phase
  - Contact additional early adopter HEI's and promote Beta Service

- **Jul 2017 - Sept 2017**
  - Business planning and Begin Business Case
  - Market Research and Consultation

- **Oct 2017 - Apr 2018**
  - Business case decision
  - If go then begin transition to production service
  - Promote service to institutions
  - Start on next phases (service enhancement/modular)
Establish Project Steering Committee (then meet monthly)

Approval for Business Case by and further work to complete Alpha

Approval to sign off Alpha MVP and commence Beta

Approval to sign off Beta MVP and move to full production
User Experience: Principles, Governance, Testing and Development

Repository Application
- Data Ingest
- Data Catalogue
- Data Discovery
- Data Publication/Download
- User Area
- Admin Area

Preservation Application
- Carry out preservation policies
- File format identification, transformation, migration
- Admin Area

Data Storage
- Online Access Data Object Store
- Archival Data Store and backup
- Integrity Checking

Reporting Application
- Discovery
- Define metrics
- Define Dashboards/API access

Institutional Systems Integrations
- Institutional Repositories
- CRIS Systems

Other Integrations
- Service API
- DataCite, ORCiD
- IRUS Data UK
- Research Data Discovery Service

Technical underpinning: data model & architecture: event notification, APIs, infrastructure as code, micro-services, authentication & security.

Provided by RDSS Framework - Platforms
Provided by RDSS Framework - Development
Provided by Jisc / Other Jisc procurement route
Service MVP (Beta)

User Experience: Principles, Governance, Testing and Development

**RD Preservation Development**
- Enhancements to systems and tools to manage research data

**Large Data Management**
- Methods for ingesting large datasets

**Sensitive Data Management**
- Methods for ingesting, managing and accessing sensitive data.

**Repository Application**
- UX improvements
- Additional features e.g. extra previews
- Large data ingest
- Managing sensitive data

**Preservation Application**
- UX improvements
- Incorporate research data preservation development

**Data Storage**
- Hierarchical storage management (HSM)
- Large data capabilities
- Sensitive data capabilities

**Reporting Application**
- Delivery and testing
- Additional metrics
- Additional dashboards

**Institutional Integrations**
- Active Data Storage
- HR Systems
- Finance Systems
- Other e.g. Impact, Ethics systems

**External Integrations**
- Identify and implement additional integrations

Technical underpinning: Testing and improvements to data model & architecture for scalability, robustness and security

Provided by RDSS Framework - Platforms
Provided by RDSS Framework - Development
Provided by Jisc / Other Jisc procurement route
## Pilot MVP Components

### RDSS Component Offer

<table>
<thead>
<tr>
<th>RDSS Component Offer</th>
<th>Number of Pilots Requiring (total = 17)</th>
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<tbody>
<tr>
<td>RDSS Repository</td>
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<tr>
<td>RDSS Preservation</td>
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<td>RDSS Reporting</td>
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<td>RDSS Storage</td>
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* Under review as additional reporting options may be available, also differing offers from full dashboard/analytics to API only. Further discovery work is underway.
<table>
<thead>
<tr>
<th>RDSS Component Offer</th>
<th>Number of Pilots Requiring (total = 17)</th>
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<tr>
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*RDSS Framework Supplier

euroCRIS Strategic Members Meeting, Bratislava
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<tr>
<th>Cluster</th>
<th>Organisation</th>
<th>Status</th>
<th>Archivematica</th>
<th>Preservica</th>
<th>Repository</th>
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<td>St George’s</td>
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<td>Repository</td>
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CERIFication project

University of St Andrews

CTU
Czech Technical University

in Prague
Data Model

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<th>RDSS class</th>
<th>CERIF entity</th>
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<tr>
<td>File</td>
<td>Medium</td>
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</table>
« RDSS logical data model mapped to CERIF logical data model, including full documentation.

« Specific use cases of RDSS, or related services, mapped to CERIF-XML and accompanying guidelines for use.

« CERIF model feedback to euroCRIS and consideration in enhancements to the standard.

« Engagement via workshop/webinar(s) to disseminate outcomes from project.
Thank you!

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