



Jisc is the UK **higher**, **further education** and **skills** sectors' **not-for-profit** organisation for **digital services** and **solutions**

advice and practical assistance for universities, colleges and learning providers

Jisc We...

Negotiate **sector-wide deals** with IT vendors and commercial publishers

Operate shared digital infrastructure and services





There is no single "solution" easily available and that meets requirements for Universities to enable better management of research data

Institutions must act now - a 'burning platform'



EPSRC and RCUK have both set out clear expectations that Institutions must take responsibility for Research Data Management, Preservation and Sharing https://www.epsrc.ac.uk/about/standards/researchdata/expectations/

Costs & risks	Risk to research funding	Reduced income	Consequential loss
	Loss of research data	Lost value of research work (17% lost key data – DAF survey)	
	Leakage of sensitive data	Legal threat and cost (Unlimited fines with GDPR)	
	Researcher reputation	Key staff leave (75% EXPECT HEI to do this)	
	Institution reputation	Defensible integrity of research, responding to FOI etc. (e.g. Climategate £10m?)	
	Cost and risk of delivery	Inefficient research and over-expensive IT	



A sector-wide approach to research data management

Today' cottage industry

c.200 UK public sector institutions perform around £6b of funded research per year in public purse every year No sector-wide visibility of RDM effectiveness

Only 20% of research data from the 1990s is still usable*

Majority of research institutions want a solution which cuts the pain

Stand-alone solutions need every institution to manage and maintain on limited budgets

Research Funders require data to be managed and EPSRC have put onus on institution to preserve and make research data available as a condition of funding

Jisc shared service

Share and optimise cost and benefit across the sector

Grow value of research data and increase research productivity

A single, cost-effective, preintegrated solution available to all

*http://dx.doi.org/10.1016/j.cub.2013.11.014



Research Data Preservation Challenge

<u>Information</u>

Can we identify our research data?

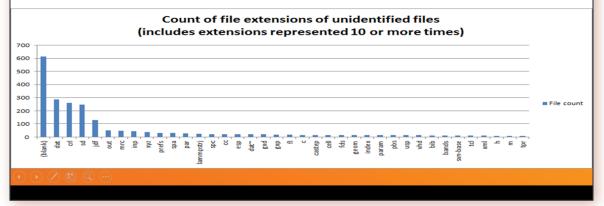
We ran Droid* over the research data deposited with us over the past year. Out of 3752 individual files:

- only 37% (1382) of the files were identified (with varying degrees of accuracy)
- there were 34 different identified file formats in the sample
- * Droid is a free tool from The National Archives that can be used to automatically identify file formats

Identified research data files Files identified by Droid (listed by file type)note that native files of the software in the previous graph of research data applications are not represented

Unidentified research data files

- Files not identified by Droid (listed by file ext)
- 107 different file extensions not identified
 - huge number with no extension (help!)
 - how do we solve the .dat file problem?



Implementing Archivematica for research data preservation at York and Hull

Jenny Mitcham (Digital Archivist) -University of York



University Pilot Institutions





































Key researcher issues drive RDSS functionality

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



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:

Advice & best practise

Capture & reuse

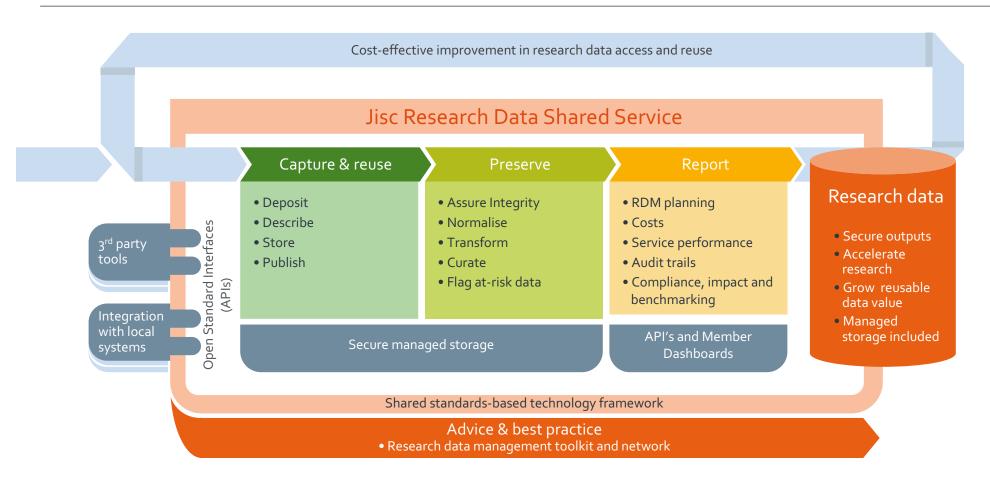
Preserve

Report

Source: Jisc DAF Survey results 2016



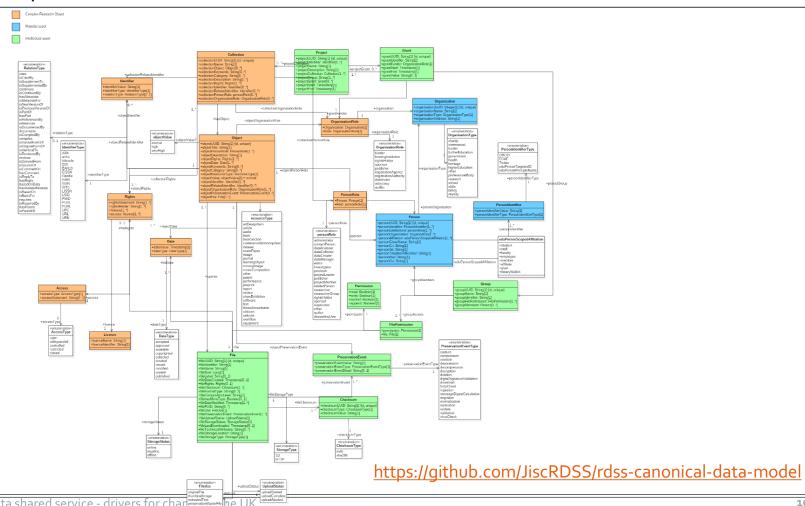
RDSS functional solution at a glance





RDSS Data Model Alpha Phase

Data Model



Preservation Partners

» Core Systems





» Preservation Development





» Records and Archives Pilot





» Information, Advice, Guidance and Community Support







Other Partners

































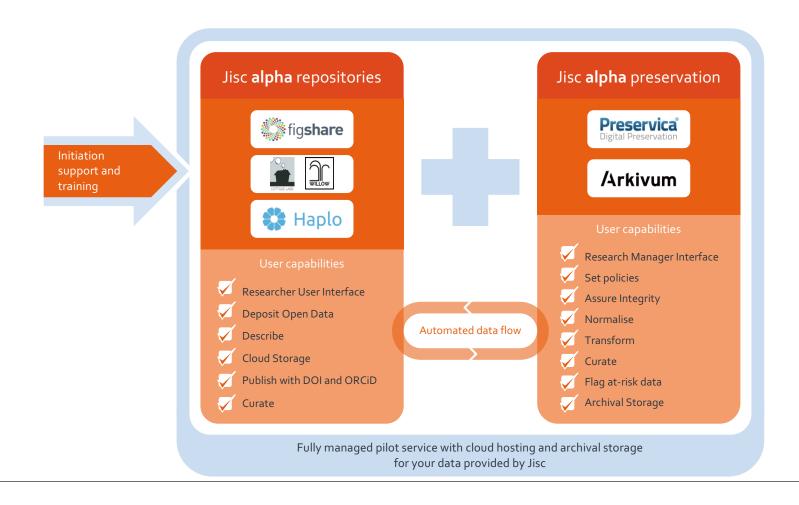






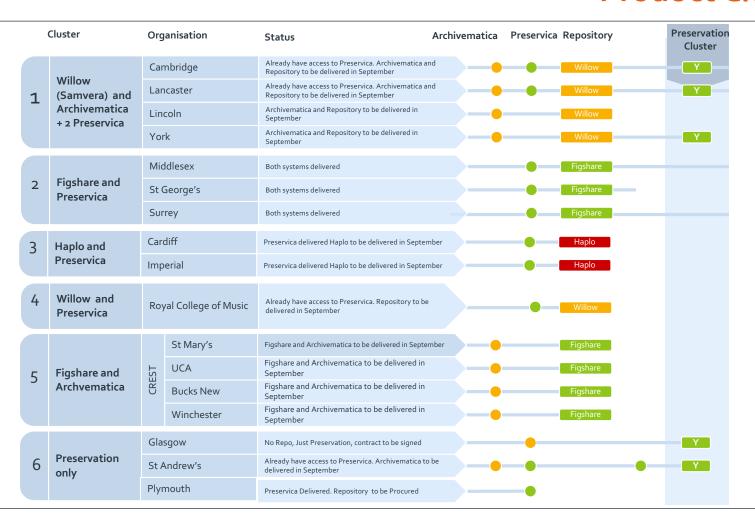


Pilot Alpha Minimum Viable Product





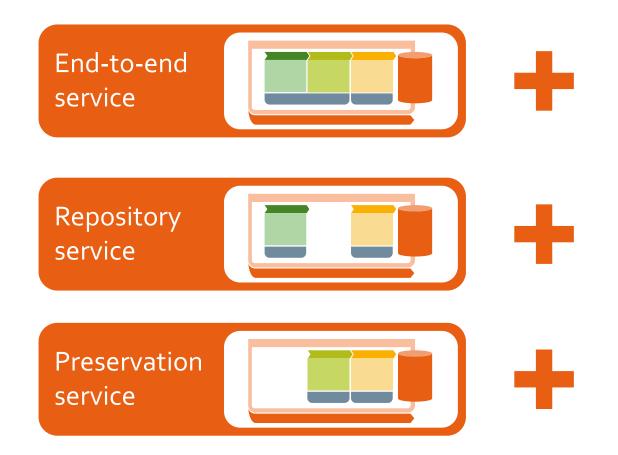
Product Clusters



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Three service options



Approach supports pilot investments in a range of components, direction of travel towards standard managed solution for all over time.

All 3 options include:

- Financial benefits
- ✓ Standards
- Advisory
- ✓ Network membership

