

"Sometimes in order to keep moving forward, not only must you take one step at a time, but you must be willing to look back occasionally and evaluate your past, no matter how painful it is. Looking back lets you know whether or not you are headed in the right direction."

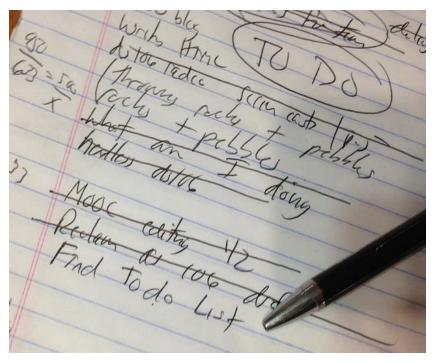


» First priority is research data

- Research output (Article/Thesis etc.)
- Research data
- Research software/code
- > Provenance metadata (method)

» But also.....

- Preservation systems tailored for multiple digital objects and data types
- Use cases and pilots for objects beyond research data



https://creativecommons.org/licenses/by/2.0/ https://www.flickr.com/photos/cogdog/

The requirement

- »Multi-tenancy access repository and preservation infrastructure for research outputs
- »Initiative user experience semi-automatic workflows
- » Cost effective/sustainable
- »Open APIs
- »Reporting tools

»A better name...

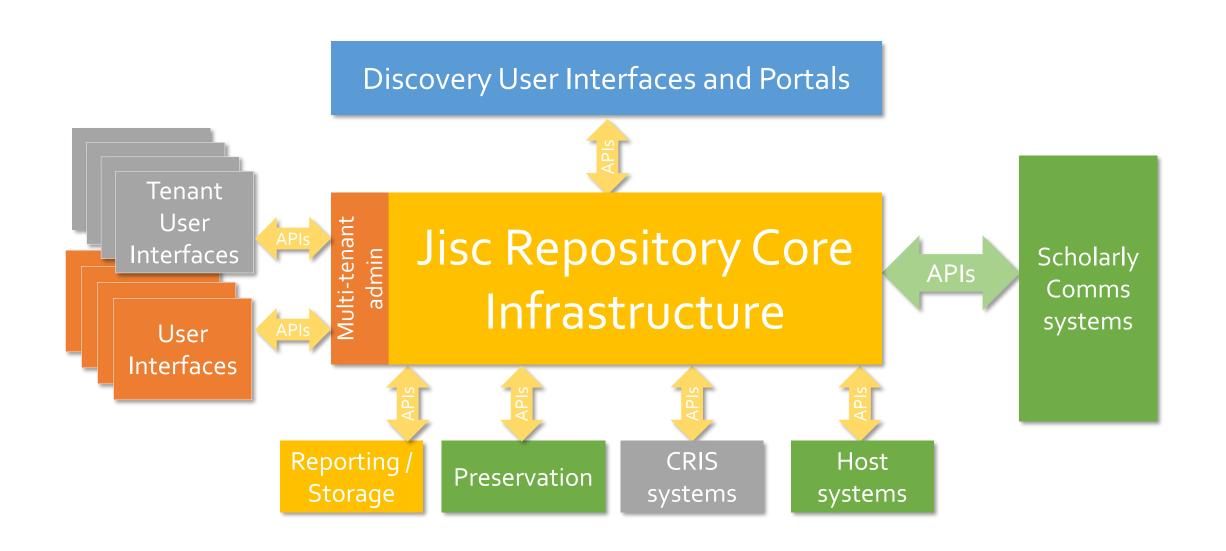
"What's in a name? That which we call a rose By any other word would smell as sweet;"



- »To do this we need
 - > True multi tenant
 - Multi content
 - Shared data model
 - Interoperable
 - > Sustainable
 - Much improved user experience



The Vision



How and Why?

- » Drivers
- » More than £5 million investment over 2 years
- » Open access

- » Sector defined requirements
 - "R@R" co-design
 - Over half the HEI sector involved





Development History









Imperial College London



























Development History

- » Technology
 - Multi-tenant core architecture
 - Interoperability framework
 - Industry standards





Multi-tenanted

- » Why is multi tenanted important?
 - Affordability / Scalability
 - Universal data model
 - Multi content
 - Interoperable
 - Single management interface
 - Multiple view/brands

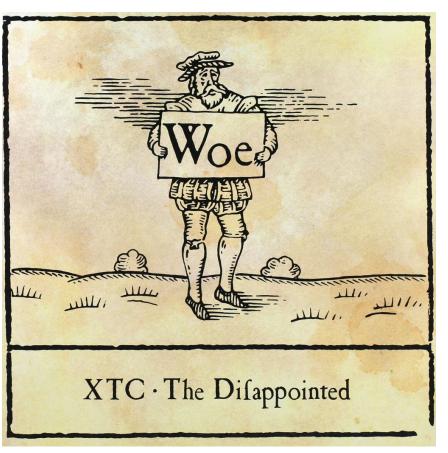


By © User:Colin / Wikimedia Commons, CC BY-SA 4.0, https://commons.wikimedia.org/w/index.php?curid=39978232



What's not quite right...

» Samvera couldn't deliver multi-tenancy



Kevin Dooley, CC BY 2.0, https://www.flickr.com/photos/pagedooley/4662765381



What's not quite right...

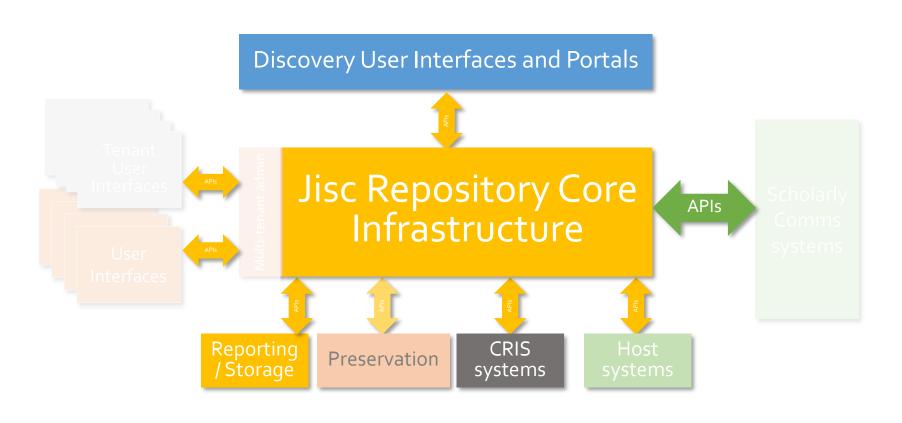
- » Nothing (we found) was truly multi tenanted
 - Separate clusters were needed
 - Existing solutions too much customisation

- » Which leads to...
 - A solution that doesn't scale nationally
 - Economically unsustainable



Where we are now

- » Core Architecture
 - > multitenant database
 - Interoperability layer
- » Data model
- » Proof of concept front end API
- » Initial Front end design





What we're working on

- » Multi tenant user interface
- >> Workflows
- » Integrations with open access service





Who else?

- » Collaborations
 - Directly with 4 repositories
 - Indirectly with EPrints
 - > Pure Adapter
 - DSpace
 - Mendeley













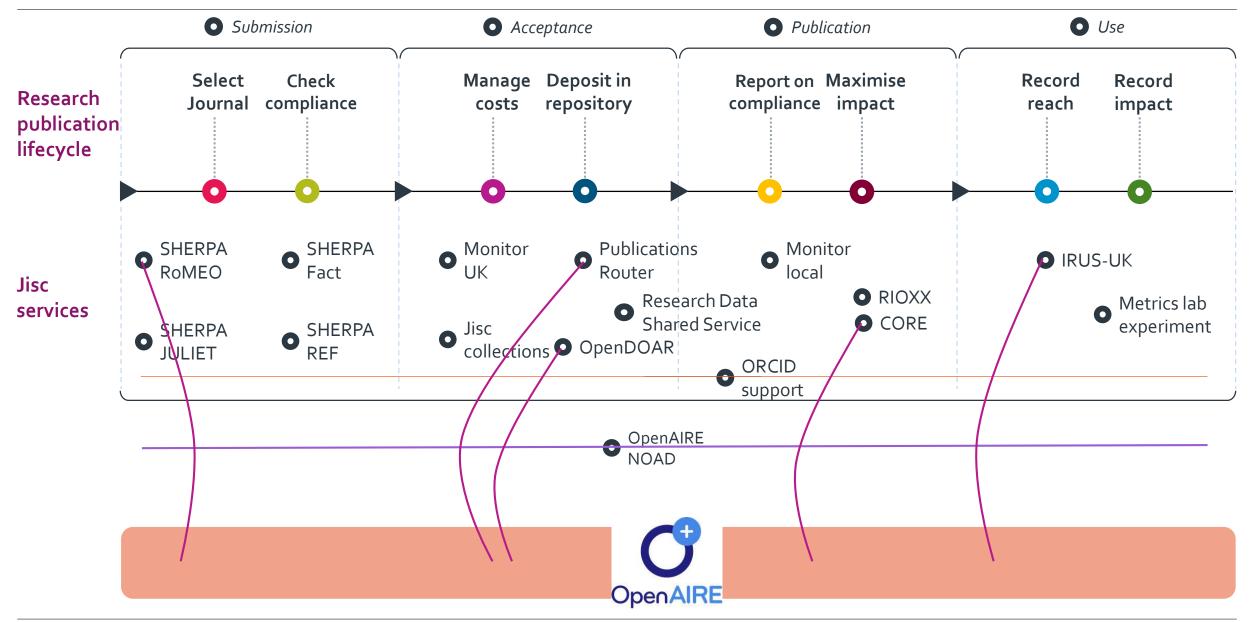








Jisc open research building on OA and working globally



Demo

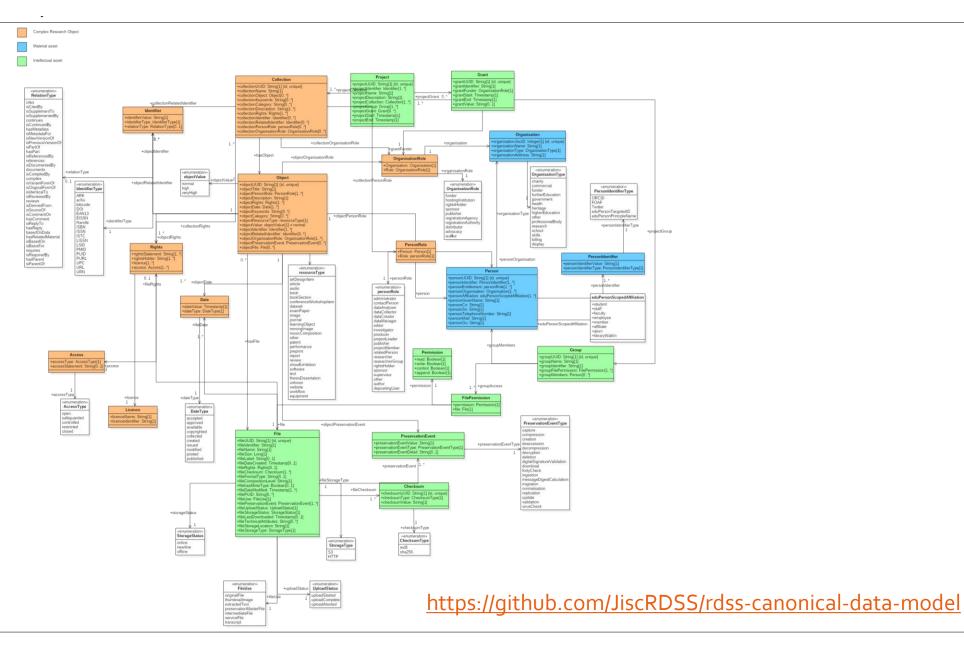


New concepts



Data Model

RDSS Data Model Alpha Phase





- »Integrations
 - Jisc Safe Share
 - Active data storage
 - Additional 3rd Party systems
 - > Updated DMP Online
 - Jisc Tiered Storage
- » Certification





Preservation action registries (PAR)



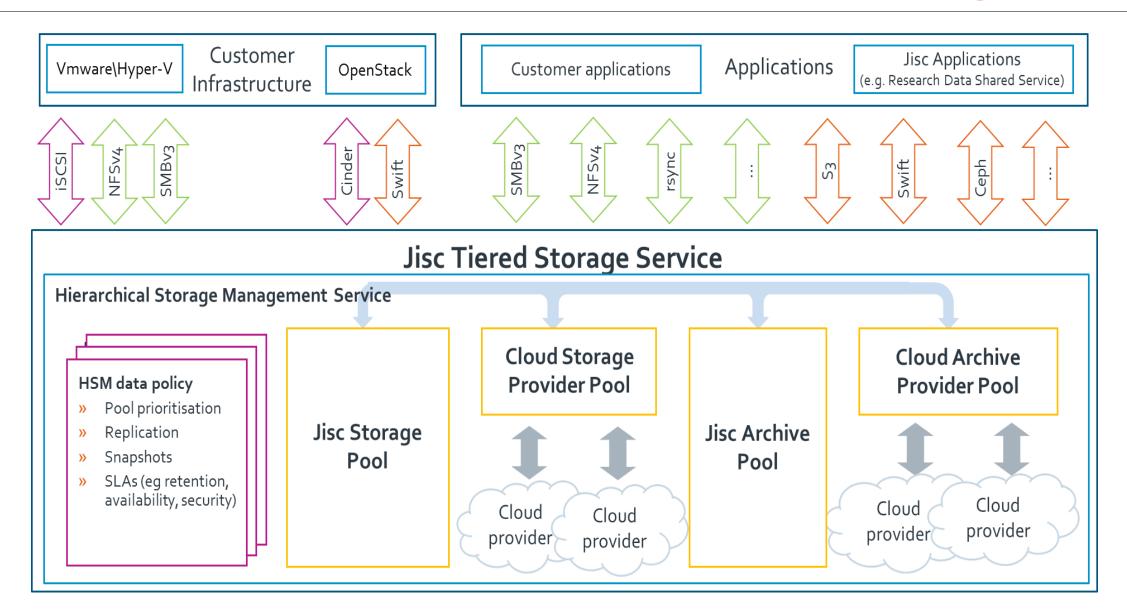
research data network: http://researchdata.network
web: https://www.jisc.ac.uk/rd/projects/research-data-shared-service
github https://github.com/JiscRDSS

Arkivum, Artefactual, Preservica & Jisc

- Sharing information on digital formats, actions (e.g. conversion) and tools (e.g. JHOVE) for preservation via APIs
- Exchange between systems and organisations on preservation policies and solutions
- » Capture best practice and give confidence for preservation actions, accelerate adoption of digital preservation
- Prototype based on Archivematica's Format Policy Register and Preservica's Linked Data Registry as part of the Jisc research data shared service



Jisc tiered storage service





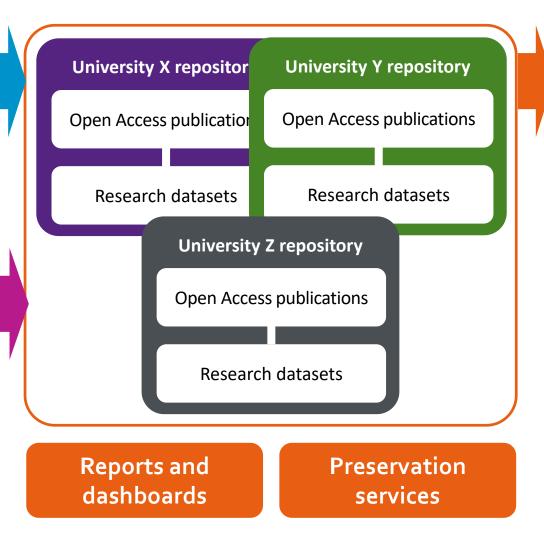
Jisc national shared research platform

University systems

» (Single Sign-On, Finance, HR..)

Information sources

- » Publications Router
- » Publishers
- » Crossref
- » ORCID
- » DataCite
- » PubMed
- » Sherpa policy tools



Information destinations

- » Google etc.
- » Discovery services
- » Jisc CORE (global OA aggregation)
- » Jisc Monitor (compliance checking)
- » Jisc Collections
- Funders systems
- » OpenAIRE + for EU



What to keep?

- » What researchers, research funders, ethics professionals, archivists, research data managers, peer reviewers see as the <u>optimal research data to keep</u> from research projects conducted at UK institutions;
- » Any conditions, such as degree of openness, timescales, etc., associated with the data
- » The reasons behind their opinions, policies, professional practices; are these based on empirical evidence, professional judgements, top-down policies, etc.
- The extent to which the data <u>is</u>, in fact, known to be kept in line with the conditions and the approaches used to achieve that;
- » The extent to which the data <u>is not</u>, in fact known to be kept in line with the conditions, the reasons for that shortfall, and plans or suggestions to address it.

Jisc and Neil Beagrie, running from now until 2019





Sustainability

- » Ensuring we have an internal business case
- » Helping users build theirs
- » Collaborating where possible
- » Creating an efficient / cost effective system
- » As open as possible





Questions





Paul Stokes

Senior co-design manager – research data

Paul.stokes@jisc.ac.uk

jisc.ac.uk



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