Electronic lab notebooks and research data management at University of Edinburgh

Experience to date, and challenges and opportunities going forward.

Dealing with Data 2015

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Overview

- RSpace ELN background
- History of RSpace at Edinburgh
- Experience to date
- Plans going forward
- A model for other universities
What are the advantages of an ELN?

1. Search
2. Data security.
3. Data visibility.
4. Versioning /audit.
5. Productivity features.
6. PI benefits
RSpace development

Designed and developed over three years with

First ELN for use at research institutions
What is RSpace

- Electronic lab notebook that lets researchers enter data
- Collaborative software that lets groups organise and share data
- Management tool that lets PIs create and manage lab workflows
- Platform that lets institutions capture, make public and archive data
## Capabilities

### Researchers
- Sketching
- Chemistry
- Notebook
- Templating
- Snippets
- PDF export
- Export to HTML
- File gallery
- Tablet friendly
- Performance
- Offline access
- File store integration
- Box, Dropbox, Google Drive integration

### Labs
- Sharing
- Messaging
- Lab set up enabled
- Group management
- Inter-group collaboration
- File store integration
- Box, Dropbox, Google Drive integration

### Institutions
- Single sign on
- Tiered admin
- Communities
- IP support
- XML export
- Repository integration
- Archive integration
- File store integration

Export and reimport of data between RSpace instances
RSpace at Edinburgh

- eCAT deployment
  2008/09

- RSpace design
  2012-13

- DataShare Integration
  2013-14

- ECDF and EASE Integration
  2014

- Initial testing
  November 2014

- DataStore integration
  March 2015

- Training and testing
  Spring/summer 2015

- Deployment
  Autumn 2015

- DataVault Integration and Mantra module
  Coming
RSpace at Edinburgh
An integrated RDM workflow for researchers and the institution

DataShare Repository

DataVault Archive

Data, files and metadata

Data, files and metadata

Data

Files

DataStore File store

An integrated RDM workflow for researchers and the institution
Research Space is partnering with Edinburgh researchers, the Library and IS to make this happen.
Experience to date:
Reported Benefits

- Integration with DataStore allows linking to files in the ELN
- Easy for PIs to keep track of lab members’ work
- PIs can delegate set up and admin to a postdoc/lab admin
- Improved organisation of protocols and lab resources
- Improved documentation of experiments
Experience to date: Issues and questions

- Questions about availability
- Getting set up/started questions
- Usage requests: PI View, More sharing options
- Product launch 7 September, Edinburgh deployment early October
- Setting up your lab video and written guide
- Implemented in monthly product updates
Going forward

At Edinburgh

- Publicising availability
- Streamlining sign up and set up of user accounts
- Improved training (Mantra)
- Integration with DataVault

RSpace plans

- Ongoing feature development
- Integrated sample management
- API to support user-developed addons
Greg Nattrass, South Australian Research Institute

I have checked out the interesting work you are doing with the University of Edinburgh in integrating ELNs with Research Data Management Systems. I’m on a committee looking at ways to implement RDMS across our organisation and am interested whether RSpace could be rolled out across other research organisations.

Susanne den Boer
University of Copenhagen

St Andrews
Glasgow
Gottingen

I am member of a task force for data management at the Health Faculty of the University of Copenhagen. We need to come up with a policy for data management and an ELN. I think we could learn a lot from your experience with RSpace at Edinburgh.