



# 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



GEORG-AUGUST-UNIVERSITÄT  
GÖTTINGEN

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

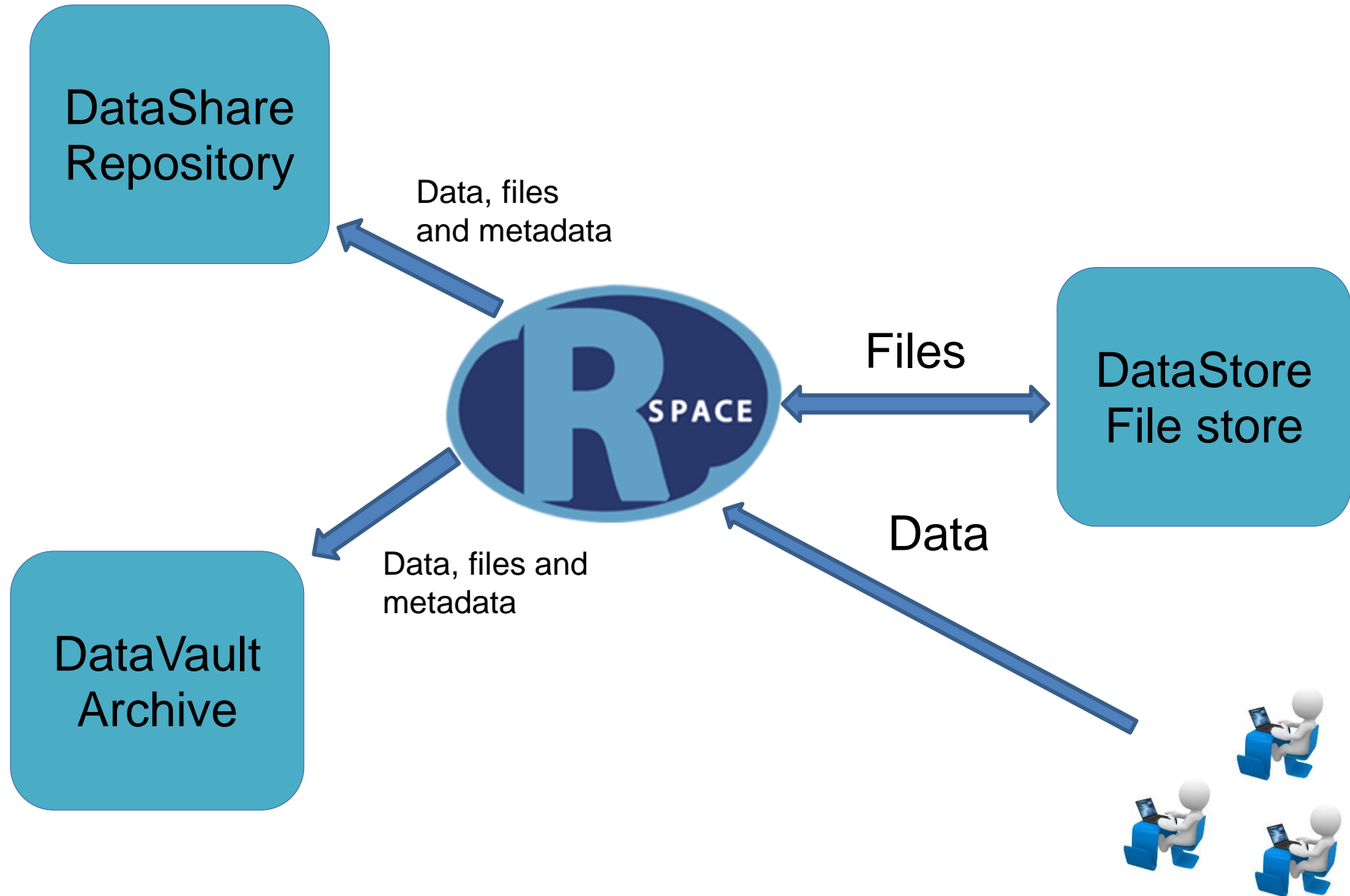
Autumn 2015

DataVault Integration and

Mantra module Coming

# RSpace at Edinburgh

An integrated RDM workflow for researchers *and* the institution





**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

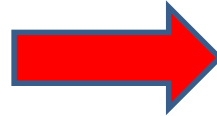
PIs can delegate set up and admin to a postdoc/lab admin

Improved organisation of protocols and lab resources

Improved documentation of experiments

# Experience to date: Issues and questions

Questions about availability



Product launch 7 September  
Edinburgh deployment early  
October

Getting set up/started questions



Setting up your lab video and  
written guide

Usage requests:  
PI View  
More sharing options



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

# EDINBURGH IS A LEADER IN ELN /RDMS INTEGRATION

Edinburgh RDM



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.

Greg Nattrass, South Australian Research Institute

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.

Susanne den Boer  
University of Copenhagen

St Andrews  
Glasgow  
Gottingen