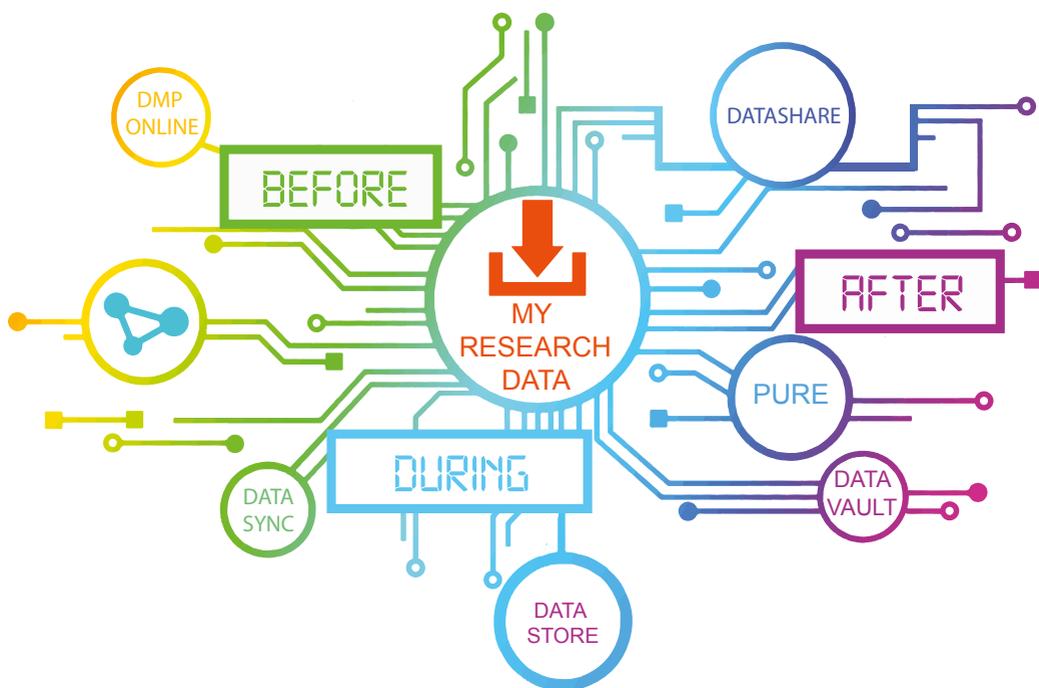


A Guide to the Research Data Service



THE UNIVERSITY *of* EDINBURGH

This booklet was produced in April 2016 by the Research Data Service Team, Information Services, at the University of Edinburgh, IS.Help@ed.ac.uk.

The latest version can be downloaded from:

<http://edin.ac/1Y5k8xf>

Research Data Management

Research Data Management (RDM) is a general term covering how you organise, structure, store, and care for the data used or generated during the lifetime and after the completion of a research project.

It is good research practice to ensure that your data are managed properly throughout the life of the project. This means planning how you will collect, store, and care for your data before you start the research process, through to how you will ensure it is maintained in the longer-term, and, if appropriate, shared with your research community and beyond.

The University of Edinburgh has a formal Research Data Management Policy, as do many research funders. These require that data are managed to the highest standards as part of the University's commitment to research excellence.

Information Services provides a suite of tools and support to assist you in managing your data. This guide provides an overview of the tools, explaining what they are, why you should use them, and how to use them.

University of Edinburgh Research Data Management policy:

www.ed.ac.uk/is/research-data-policy

Research Data Service

Tools and support to help you before, during and after your research project:

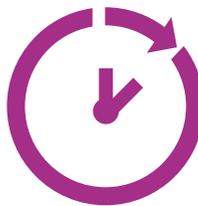
BEFORE: plan how you will collect, manage, and store your data, including storage and backup, sensitivity of the data, and whether it can be shared;

DURING: find and analyse data, store and backup active data, synchronise your data across devices and with research collaborators, and version your software and files;

AFTER: record, share, and archive your data for the long-term;

TRAINING AND SUPPORT: online and face-to-face workshops and courses, plus direct support when you need it.

For more information visit: www.ed.ac.uk/is/data-management or email the Research Data Service team: IS.Helpline@ed.ac.uk.



BEFORE

create a data
management
plan

DURING

working with
data

AFTER

share and
archive your
data

TRAINING
&
SUPPORT

Creating a data management plan



What is DMPonline?

DMPonline is a tool created by the UK's Digital Curation Centre (DCC) to help researchers write a Data Management Plan (DMP).

Why should I use it?

The tool includes a number of templates for funders in the UK and overseas so you can write a DMP according to the specific requirements you need to meet. It is customised for Edinburgh use too so you are provided with examples and guidance based on local support and services. You can also use the Edinburgh customised template if your funder does not provide one. If you are working with other researchers you can share your plan to co-author it. You can also export your plan once you complete it. You can view your plan as a web page and also download it as a plain text or as a pdf file.

How can I access it?

The tool is available from: <http://dmponline.dcc.ac.uk>. You can sign up by entering your email, organisation, and password. You can also login using your EASE username and password once you have linked these institutional credentials to your DMPonline account.

Contact the Research Data Service team at IS.Helpline@ed.ac.uk to assist you with your data management plan.



What is Data Library & Consultancy?

The Data Library & Consultancy team assists researchers to discover and use datasets for analysis, learning and teaching.

Data librarians are available to help you find answers to data-related questions.

Why should I use it?

Your research project may involve acquiring and analysing existing datasets, not just collecting new data. In some cases you may know where to find these datasets; but in others you may need help to find them or to access them. Some may have special access requirements for reasons of confidentiality.

The Data Library can help you find data freely available on the internet or licensed by the University. We can match your research topic to data resources including surveys, censuses, mapping, and databases. We can help you create teaching datasets and provide hands-on data workshops for your classes. Our online data analysis server (<http://stats.datalib.edina.ac.uk/sda>) allows users to do basic statistical analyses, tables, regressions, etc., and download subsets for use in other statistical analysis packages.

How can I access it?

View the Data Library and Consultancy page: www.ed.ac.uk/is/data-library

Contact a data librarian: IS.Helpline@ed.ac.uk



What is DataStore?

DataStore is file storage for active research data, and is available to all research staff and postgraduate research students (PGRs).

DataStore provides a free individual allocation for each researcher, as well as shared group spaces. Additional capacity of virtually any size is available.

Why should I use it?

It is fully backed-up, secure, resilient, multi-site storage, and new storage allocations can be created immediately.

How can I access it?

You can connect to DataStore as a network shared drive, and users of the University's Supported Desktop already have their individual DataStore space mapped to their M: drive.

Other connection methods and full connection instructions are available at:

<http://edin.ac/1JH8oej>

Synchronising data



What is DataSync?

DataSync is a tool to synchronise and share research data with collaborators. It has an app to synchronise data to computers and mobile devices, and a web interface to allow access to data from any web browser. Data can be shared with anyone who has an email address, via the web interface.

Why should I use it?

You can synchronise your files across multiple computers and devices, access your documents via a web browser, and share data with colleagues anywhere.

Your data will be stored at the University of Edinburgh and managed by Information Services.

You will have dedicated DataSync storage, plus the ability to connect up your personal and group data on the RDM DataStore for effectively unlimited storage capacity, giving you the ability to synchronise and share your active research data.

How can I access it?

You can activate your account by logging in to the DataSync web site using your University username and password at: <https://datasync.ed.ac.uk>

Apps are available for Windows, Mac OS X, Linux, iOS and Android.

Documentation is available at: www.ed.ac.uk/is/datasync

DURING



What is Subversion?

Subversion is a version control tool which allows users to store code. It is also available as an extension called SourcEd which provides a web based collaboration tool integrated with your repository.

Why should I use it?

When documents stored in a Subversion repository are updated the old versions are kept so you can revert if necessary. The service also allows multiple people to collaborate on documents.

Repositories may be used both by Edinburgh University researchers and by their collaborators, who may be external to the University.

Any researcher or member of staff may request the creation of a personal Subversion repository and a group or project repository.

How can I access it?

The subversion service is available at no charge. This provides a default quota of 50MB for all repositories. This can be increased upon request. If you require a repository of >10GB then a charge may be made for this.

Full details can be found on the University Wiki:

www.wiki.ed.ac.uk/display/ecdfwiki/Version+Control+Service

Recording datasets using PURE



What is PURE?

PURE is the current research information system. It contains individual profiles of research information for all staff members involved in research. Staff members are encouraged to add content and edit their profiles.

Why should I use it?

The University is using PURE to record descriptive data (metadata) about research data in order to meet institutional and funder policy requirements. The metadata must be sufficient to allow others to understand what research data exists, how it was generated, and how to access it. Datasets that have been described in PURE are automatically shown as part of a staff member's online profile in Edinburgh Research Explorer (www.research.ed.ac.uk) alongside other research outputs such as journal articles, conference papers, and grants.

If data are stored in DataShare or an external repository, the DOI can be added to the record in PURE to link them together.

How can I access it?

Users can log into PURE using their EASE Username and password via: www.pure.ed.ac.uk

For information and help on how to add a dataset description to PURE see: <http://edin.ac/1OF8Aug>



What is DataShare?

Edinburgh DataShare is a free, open data repository which allows University of Edinburgh researchers to upload, share, and license their data resources for online discovery and re-use by others. Your data will be discoverable through search engines to maximise visibility and impact. DataShare can provide you with usage statistics so you know when your data have been downloaded.

Why should I use it?

- Increase impact of your research;
- Make your data assets discoverable and citable;
- Minimise the risk of data loss for your own future use;
- Meet funding body requirements & comply with University policy;
- Ensure your research data is preserved for posterity.

A big advantage of depositing your data is that they will be preserved - even for your own future use. The system creates a permanent record, a persistent identifier (DOI), and a suggested citation, so that your work can be formally attributed when re-analysed by others.

How can I access it?

Simply click on the Deposit button on the home page of the repository and log in with EASE: <http://datashare.is.ed.ac.uk>



What is Data Vault?

The Data Vault is an archive storage service where you can safely store your research data for the long term.

Why should I use it?

Your data will be kept safe from accidental deletion and, when combined with a record of the dataset in PURE, will fulfil the expectations of research funders who require long term storage of research data.

Data can be copied into the Data Vault from your DataStore, and when a retrieval request is made, a copy will be placed back into your DataStore. Using the Data Vault will allow you to archive old data from your DataStore, to free up space for new research. The Data Vault also makes a good location for storing specific versions of your data, for example at the end of a grant.

How can I access it?

The Data Vault is currently under development. It will be a web-based system accessible using your EASE username and password. Keep an eye out for announcements about the service at: <http://datavault.ed.ac.uk>



MANTRA

MANTRA (Research Data Management Training) is a free, online non-assessed course with guidelines to help you understand and reflect on how to manage the digital data you collect throughout your research. Interactive quizzes and real life stories make the training fun to take on your own.

Take the course from start to finish, or pick and choose from nine data management topics. MANTRA website: <http://datalib.edina.ac.uk/mantra>

MOOC

The Research Data Management and Sharing MOOC (Massive Open Online Course) uses the Coursera on-demand format to provide short, video-based lessons and assessments across a 5-week period, but learners can proceed at their own pace. Certificates of Accomplishment will be available to any learner who completes a course for a small fee. Subjects covered are:

- Understanding Research Data
- Data Management Planning
- Working with Data
- Sharing Data
- Archiving Data

Delivered by the University of Edinburgh in collaboration with the University of North Carolina: www.coursera.org/learn/data-management



Workshops and courses

These are short courses and interactive workshops open to all research staff and postgraduate research students who are interested in finding out how to manage their research data effectively and efficiently, and creating data management plans as part of their grant applications. They focus on good practice in research data management, working with personal and sensitive data, writing data management plans, and handling data with SPSS.

Courses on any aspect of RDM can be tailored for schools, institutes or research groups on demand. Here is a list of some of the courses that we are currently offering:

- Managing your research data: why is it important and what should you do?
- Working with personal & sensitive research data
- Creating a data management plan for your grant application
- Good practice in research data management
- Handling data using SPSS
- Introduction to Visualising Data in ArcGIS / QGIS

Find a course relevant to your needs from:

<http://edin.ac/1Y5eP04>



Awareness raising

Bespoke RDM sessions for Schools/Centres/Institutes are organised and delivered by the RDM Team. Contact Information Services to organise a session for your School.

RDM website

The RDM website is a one stop shop for information about the University of Edinburgh RDM Programme and Services:

www.ed.ac.uk/is/data-management

Edinburgh Research Data Blog

The Research data blog has been set up to communicate progress on the University's RDM programme: <http://datablog.is.ed.ac.uk>

Help and Support

Please direct your general enquiries about Research Data Management to the IS Helpline:

Web: Self service portal (preferred)

Email: IS.Helpline@ed.ac.uk

Phone: +44 (0)131 651 5151

Availability: IS Helpline is open 24 hours a day, 7 days a week



If you require this document in an alternative format, such as large print or a coloured background, please contact The IS Helpline by email IS.Helpline@ed.ac.uk or by telephone +44 (0)131 651 5151

The University of Edinburgh is a charitable body, registered in Scotland, with registration number SC005336, VAT Registration Number GB 592 9507 00, and is acknowledged by the UK authorities as a "Recognised Body" which has been granted degree awarding powers.