

# A brief introduction to Research Data Support

Kerry Miller Research Data Support Officer Research Data Service data-support@ed.ac.uk

## What is the Research Data Service



We provide and advise upon a range of tools and support to help before, during and after a research project:

**BEFORE:** identify existing datasets for reuse, plan how to collect, manage, and store data, including storage and backup, sensitivity of the data, and whether it can be shared;

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

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

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

## Tools

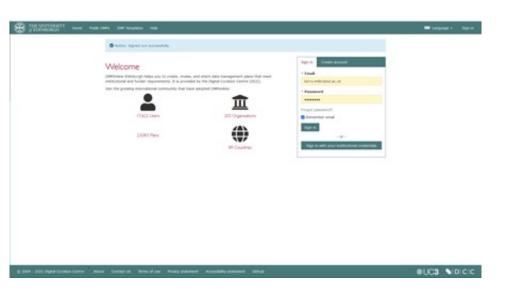


DMPonline – Data Management Planning DataStore & OneDrive– Active Data Storage GitLab – Version control & collaboration Subversion - Version control & collaboration DataSync – Collaboration & Synchronisation DataShare – Sharing and Preservation of research data DataVault – Archiving of research data Pure – Recording the existence and location of data

# Free and open web-based tool to help researchers write plans: <u>https://dmponline.ed.ac.uk</u>

It features:

- Templates based on different requirements
- Tailored guidance (disciplinary, funder etc.)
- Customised exports to a variety of formats
- Ability to share DMPs with others





## DMPonline

#### DataStore



DataStore provides active storage for all research staff and postgrad students.

- RDM DataStore provides a free 'at point of' use allocation (currently 0.5TB).
- Additional capacity can be purchased for £175 per TB per annum.
- Support for very large data (>1PB) hosting available.
- This facility also provides a data services cloud for hosting specific data access mechanisms, or for integrating additional computational infrastructure.
- Accessing DataStore:

http://www.ed.ac.uk/information-services/computing/desktop-personal/network-shares/

## **OneDrive for Business**



OneDrive For Business is cloud-based file storage for all staff and students as part of the Office 365 suite, allowing you to store and access personal and work files from anywhere.

Upload or sync any document from your local computer to OneDrive. It will then be available to you from any computer, tablet or phone.

Users receive 1 Terabyte (TB) of storage on OneDrive to store all personal and University documents.

Any files created in <u>Office Online</u> are automatically backed up in your OneDrive space.

Share and work documents with friends and colleagues both inside and outside the University (latter may require Microsoft login).

Easily recover deleted documents or roll back to previous versions.

https://www.ed.ac.uk/information-services/computing/comms-and-collab/office365/onedrive-for-business

### GitLab



GitLab is a version control tool which allow users to store and track changes to code and other documents.

Suitable for distributed development or where branching and merging is a common operation.

Gitlab documentation is available at:

https://www.wiki.ed.ac.uk/display/ResearchServices/GitLab

The GitLab service can be accessed at: <u>https://git.ecdf.ed.ac.uk/</u>

#### Subversion



Sunbversion is a version control tool which allow users to store and track changes to code and other documents.

Suitable for larger projects that require centralisation or granular access control.

Subversion documentation is available at:

https://www.wiki.ed.ac.uk/display/ResearchServices/Subversion

Apply for a Subversion repository at: <a href="https://svn.ecdf.ed.ac.uk/svnreg/">https://svn.ecdf.ed.ac.uk/svnreg/</a>

### Open research tools



UoE supports a small, but growing, number of tools to support Open research. We currently support or subscribe to:

- Rspace online electronic notebooks
- WikiBench an ELN based on the university's Confluence wiki platform
- protocols.io an online platform for the creation, management, & sharing of research protocols or methods
- Jupyter Notebooks & Notable Service computational notebooks

https://www.ed.ac.uk/information-services/research-support/research-data-service/during/open-research-tools

### DataSync



DataSync is a file-hosting service for data:

- Allows sharing and synchronisation of data.
- Sync using local clients.
- Share using local clients or web URL with colleagues anywhere.
- 20GB free storage or map to personal / group data on DataStore as required.
- Using the ownCloud open source application.

Accessing DataSync: <a href="http://www.ed.ac.uk/is/datasync">www.ed.ac.uk/is/datasync</a>



## Edinburgh DataShare

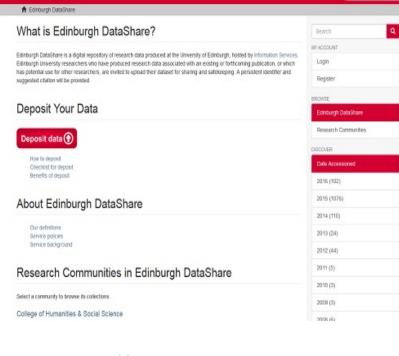
Edinburgh DataShare is the University's OA multi-disciplinary

data repository hosted by the Data Library :

http://datashare.is.ed.ac.uk

Assists researchers who want to share their data, get credit for data publication, and preserve their data for the longterm (DOI, licence, citation)

It can help researchers comply with funder requirements to preserve and share your data and complies with Edinburgh's RDM Policy



DataShare

NFORMATION SERVICES



THE UNIVERSIT

Contact us

### DataVault



# A service to ensure integrity and long-term retention of golden copy research data.

The DataVault allows data creators at the University of Edinburgh to:

- Store their data safely in the University's archival storage platform
- Link this data to a record in Pure without having to re-enter any of the data
- Receive a DOI for the data which can be used in publications and other outputs
- Comply with funder and University requirements to preserve research data for the longterm, and
- Be confident that their data will be there for them, or their nominated delegate, to reuse in the future as and when required.

https://www.ed.ac.uk/information-services/research-support/research-data-service/sharing-preserving-data/datavault

#### Pure

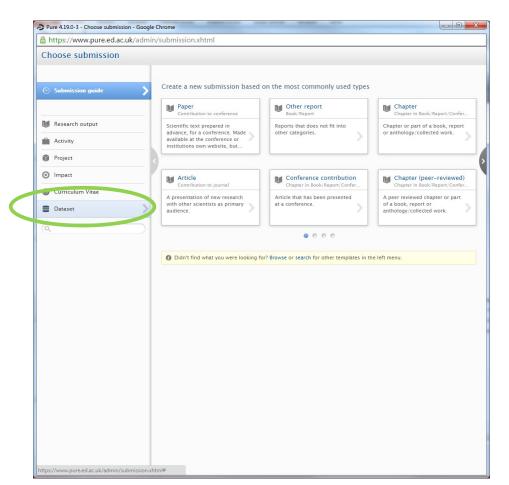
Describe all datasets in PURE (Dataset field):

https://www.ed.ac.uk/informationservices/research-support/research-dataservice/after/pure-for-data

Doing this will help datasets to be discovered, accessed, and reused as appropriate.

Feeds directly into REF!

Edinburgh Research Explorer: <u>http://www.research.ed.ac.uk</u>





#### Support



Writing Data Management Plans Answering RDM queries Face-to-face training Online training Website & Blog

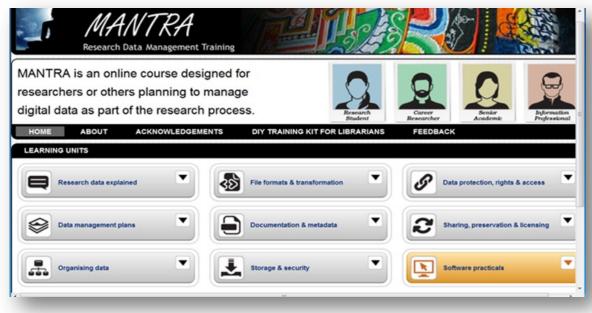
## MANTRA – online RDM training



MANTRA is an internationally recognized self-paced online training course developed by the Data Library Team for PGR's and early career researchers in data management issues.

Anyone doing a research project will benefit from at least some part of the training (and you can pick and choose).

Data handling exercises with open datasets in 4 analytical packages: R, SPSS, NVivo, ArcGIS.



http://datalib.edina.ac.uk/mantra

#### Research data support



General RDM queries & requests for help writing a DMP should be sent to <u>data-support@ed.ac.uk</u>

RDM website: <a href="http://www.ed.ac.uk/is/research-data-service">http://www.ed.ac.uk/is/research-data-service</a>

Training Courses: <u>www.ed.ac.uk/is/data-training</u>

RDM blog: <a href="http://datablog.is.ed.ac.uk">http://datablog.is.ed.ac.uk</a>