



## 17 Things for IT Support Staff and Specialists

An overview of best practices, resources and tools that you can get to know to be aware of research data management into your daily IT support practice.

### Contents

Understanding the Research Ecosystem in the Netherlands

Learning Resources

Data Reference

Data Management Plans

Support for the Data Life Cycle

Metadata

Data Licensing & Privacy

Community of Practice

... to help IT support staff and specialists to engage in research data management!

### Understanding the Research Ecosystem in the Netherlands

Providing the right support for academic and research institutions also requires some basic understanding of the motivations and end goals of the research community, as well as funding partners and service providers.

1. Check the different global goals and career paths with employment conditions from the association of universities in the Netherlands,  
[edu.nl/n433w](https://www.edu.nl/n433w)
2. Get acquainted with the providers of funding for research, like NWO, and computational resources, like SURF,  
[edu.nl/ufkcd](https://www.edu.nl/ufkcd) & [edu.nl/k8efp](https://www.edu.nl/k8efp)

### Learning Resources

IT support staff and specialists should be aware of different needs for research data management to be able to assist researchers.

3. Get familiar with research data management concepts and requirements in the web page of the course Essentials 4 Data Support,  
[edu.nl/n3jge](https://www.edu.nl/n3jge)

### Data Reference

The correct referencing for data requires the use of well-known tools to provide universal findability and easy referencing. Usability and user-friendliness are key aspects that will improve the experience of the researchers, just like maintaining an updated documentation about the organization and structure of data storage systems.



4. Generate persistent identifiers that will provide unique and permanent access to data,  
[edu.nl/6kmtm](https://edu.nl/6kmtm)
5. Learn about the different services provided at European level by EUDAT,  
[edu.nl/7h89n](https://edu.nl/7h89n)

### Data Management Plans

The facilitation of data management plans should be made with the necessary resource provision. It is important to gather the correct requirements from the users and to provide the necessary systems to support them, including software and services.

6. Understand what may be required to support a data management plan with DMPonline,  
[edu.nl/77pmp](https://edu.nl/77pmp)

### Support for the Data Life Cycle

The systems should guarantee the support for the data life cycle. Ensuring interoperability and availability are necessary practices, as well as to keep policies that ensure the correct collaborative use of storage facilities.

7. Provide support for collaborative tools for sharing data and collaborative editing, such as ResearchDrive,  
[edu.nl/cu8yx](https://edu.nl/cu8yx)
8. Find the best way to upload and transfer data between different compute systems with a data ingest tool or B2SAFE,  
[edu.nl/xq7ma](https://edu.nl/xq7ma) & [edu.nl/bk4eh](https://edu.nl/bk4eh)
9. Explore the benefits that a integral data management system like iRODS can provide,  
[edu.nl/cquaj](https://edu.nl/cquaj)
10. Find tools that are available to help with digital preservation using the Digital Preservation Handbook,  
[edu.nl/vaxwg](https://edu.nl/vaxwg)
11. Make use of available external resources that help to scale out local systems, such as data archives, and connect with the suitable certified repositories with CoreTrustSeal,  
[edu.nl/e69mh](https://edu.nl/e69mh) & [edu.nl/ugb9e](https://edu.nl/ugb9e)

### Metadata

It is important to understand that there may be different requirements for metadata per domain, and also to find the correct tools and systems to support them. Getting information from different research groups is very useful to understand the requirements.



12. Determine what standard (for identifying, citing, representing and sharing) data and metadata is appropriate to recommend or apply, by searching the RDA adopted FAIRsharing, which also show you which repositories implement which standards,

[edu.nl/ujv8q](https://edu.nl/ujv8q)

13. Be aware of the different ontologies that may be used in each research field,

[edu.nl/ct8en](https://edu.nl/ct8en)

### Data Licensing & Privacy

Understand the license requirements of the software provided, and make it compliant with necessary regulations (e.g. GDPR). Ensuring support for encryption when dealing with sensitive data is crucial, as well as having the correct protocols and policies implemented to keep the systems up-to-date to prevent security pitfalls.

14. Choosealicense helps to choose a software license,

[edu.nl/6bn3d](https://edu.nl/6bn3d)

15. Check that any internal data management services are supporting encryption, and any external one is provided at best by partners with ISO security certificate,

[edu.nl/7u9hf](https://edu.nl/7u9hf)

16. Read the guidelines for privacy, the General Data Protection Regulation, for data protection and security,

[edu.nl/qaj6j](https://edu.nl/qaj6j) & [edu.nl/6qqby](https://edu.nl/6qqby)

### Community of Practice

It is always useful to be connected with different IT support groups from other institutions and getting to know the existing efforts in research data management in the Dutch and international context.

17. Learn about different groups that work on RDM for different Dutch research institutions,

[edu.nl/4x8wy](https://edu.nl/4x8wy)

### Contact Information

This document is an audience-specific version (for IT support staff and specialists) of the 23 Things for/by the Dutch community, created by the LCRDM task group RDA 23 Things ([lcrdm.nl](https://lcrdm.nl)). The original 23 Things can be found at [edu.nl/w7e34](https://edu.nl/w7e34), the LCRDM adaption for the Dutch community can be found at [doi.org/10.5281/zenodo.3465895](https://doi.org/10.5281/zenodo.3465895). If you have any relevant resources for the 23 Things, please contact the LCRDM coordinator.

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