FBM Research data management - FAQ

Below are some answers to the most recurrent questions regarding research data management at UNIL. In case you haven't found the information you were looking for, please feel free to contact the FBM IT Support.

1. May I freely use my professional data? Who owns my professional data?

Regardless of the location where data is saved/stored or which storage medium is used, all professional data created or modified during your contract with UNIL belongs to UNIL (exception applies in the case of a copyright where the rights belong to the creator). This means that for any use other than scientific or academic (commercialization for example), a special agreement from UNIL's management is required.

Based on UNIL's rules (Art. 70-72 LUL), here are some details about data management and use:

- In case of departure of a group leader (Principal Investigator), a copy of every data created or modified during the professional activity must be given to the FBM Deanship (Directive 4.5 Art. 19 al. 1) regardless of the level of confidentiality. For this purpose, we recommend saving it on the NAS.
- In case of commercial use, a special agreement is required from UNIL's management.

In case of doubt, please contact UNIL's Legal Service.

2. Where can I store my professional data at UNIL? What infrastructure is available to me?

UNIL encourages employees to store all their professional data generated as part of their work at UNIL on the University's institutional infrastructure (Directive 4.5 Art. 8 al. 2). For this purpose, the UNIL IT Center (Ci) offers NAS storage server.

The UNIL NAS server (Isilon) is a safe and robust storage infrastructure which guarantees the security and the sustainability of your work. This network storage server is available for all employees with a UNIL contract and offers a high availability rate. It is divided into two distinct trees - research and administrative| - in order to manage the data according to their nature.

3. What are the IT resources dedicated to research at UNIL? What are the conditions of use?

Since June 2019, the IT Centre of UNIL has strengthened its IT services dedicated to research by creating the Scientific Computing and Research Support Unit (DCSR). This unit is offers its expertise in data management and provides new storage and computing infrastructures.

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The DCSR NAS server (nasdcsr.unil.ch\RECHERCHE) is dedicated to the storage of all research data organized by project for each Principal Investigator (PI). HPC infrastructures allow researchers to do scientific computation.

To benefit from these resources, IP must complete the DCSR application form and, if they want to store research data, they also have to submit a Data Management Plan (DMP).

These services are subject to a charge and their use is invoiced to IP according to the annual rate schedule (UNIL authentication required) established by the IT Center of UNIL.

4. May I use a cloud storage service (Dropbox, Google Drive, iCloud, etc.) to store and save my data?

The use of a cloud storage service must meet the UNIL's legal requirements. Furthermore, the use of this kind of services is the user's responsibility: he assumes/accepts the associated risks and the IT Service provides no support.

UNIL allows the use of other cloud hosting services at the condition that data is stored in Switzerland (Directive 6.9, art. 5). If data is stored outside of Switzerland, it must be encrypted and the encryption key must be stored in Switzerland.

For cloud storage, UNIL has opted for Microsoft's OneDrive solution. However, this storage service can only host professional administrative data. Using OneDrive to store research data is prohibited.

Nevertheless, we draw your attention to the fact that the use of cloud storage services may involve some risks for your data:

- The service provider may modify its offer at any time (service interruption, rate changes, etc.).
- In case of loss of data, UNIL's IT service provides no support.
- Data can be read or used by third parties (foreign legislations are sometimes more flexible on data protection).

6. How to fill my Data Management Plan? Where can I find more information about Open Data?

In order to give the scientific community and the general public free access to research data, the SNF is implementing measures for the submission of projects. Since October 2017, every project has had to be covered by a Data Management Plan (DMP), but since April 2023 it has no longer been compulsory to submit it at the same time as the funding application.

On the CHUV side, the BIUM (Bibliothèque Universitaire de Médecine) provides advice to improve the visibility and the impact of publications and offers various training courses to help FBM researchers (from UNIL and CHUV).

On the UNIL side, there is a website dedicated to Open Science. UNIRIS created a online DMP tool and can validate the DMP generated through it.

Finally, the Graduate Campus team organises workshops about DMP writing and Open Data publication. Please refer to the courses and register online.

7. Is there any software to facilitate laboratory and inventory management (LIMS, ELN, etc.) at UNIL?

Several ongoing projects in different the universities address these questions. Indeed, even if it is very tempting to use software downloaded from the Internet that could meet the needs of a group, the management will rapidly exceed the group or the department's (financial and human) resources and (legal and IT) knowledge and skills.

More and more users are interested in the replacement of paper laboratory notebooks, want to make the management of data carriers more effective, are looking for a software to manage the inventory of the lab's equipment.

To meet those needs, the IT Service has tested different softwares and is in close collaboration with the EPFL which has already implemented a solution. For the time being, pilot projects and tests have demonstrated that we need a very thoughtful approach. Indeed, it was found that:

- Hidden costs (time to set up the software, follow-up, infrastructure, etc.) involved in implementing this kind of software are very high (about 20'000 CHF/year per laboratory depending on the software, even if the program is free);
- Software are often not adapted or don't meet the user's needs;
- More and more scholarships and research foundations update their directives about storage and data processing requiring the researchers and their tools to adapt.

Several research groups have currently demonstrated a growing interest in these kind of tools, which is why the FBM Deanship has decided, during its meeting on May 16, 2018, that researchers were free to choose their own system of electronic laboratory notebooks providing that data is stored at the UNIL.

8. How do I e-mail attachments larger than 30 MB? How to share data?

The Division calcul et soutien à la recherche (DCSR) of the UNIL IT Center (Ci) provides a transfer tool to send data to collaborators inside or outside UNIL.

The SWITCHFileSender web application also enables you to send files of up to 50GB to a list of recipients of your choice, as well as inviting users to use the service.

9. How long do I have to keep my data after the publication of my research?

After publication, data produced within the research must be kept safe for 10 years (Directive 4.2, art. 2.4). The research project manager is responsible for the suitable data retention.

UNIRIS (service des ressources informationnelles et archives de l'UNIL) put different online articles about research data management on its website. You will also find about the best practices for research data management, preservation and archiving.

For further information, please contact UNIRIS.

Sources

Directives and legislation

- Directive de la Direction 4.2 Intégrité scientifique dans le domaine de la recherche et procédure à suivre en cas de manguement à l'intégrité (Art. 4.2, 2.4)
- Directive de la Direction 4.5 Traitement et gestion des données de recherche
- Directive de la Direction 6.9 Fichiers informatiques et protection des données personnelles ou sensibles (Art. 5)
- Loi sur l'Université de Lausanne du 6 juillet 2004 (LUL) Chapitre III Propriété intellectuelle Art. 70 Propriété intellectuelle

References and contact and legislation

- Centre informatique (Ci) / Division calcul et soutien à la recherche (DCSR)
- Bibliothèque Universitaire de Médecine (BIUM)
- Research data management (UNIRIS)
- Graduate Campus
- Unisante

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