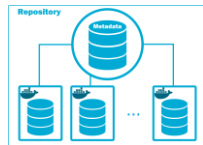


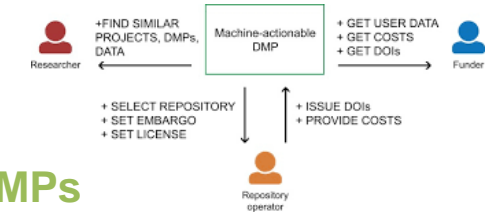
INVENIO RDM

Research Complete

- Store
- Access
- Re-use



Source: https://figshare.com/articles/DTU_Research_Data_Life_Cycle/4258019/1
<https://libguides.mines.edu/c.php?g=949816&p=6850016>



maDMPs

Research Planning

- Defining requirements from funding agencies
- Clarifying legal framework and ethical issues
- Re-using existing data

Active state of research

- Acquire
- Process
- Analyse
- Tracking
- Share



What is eLabFTW?

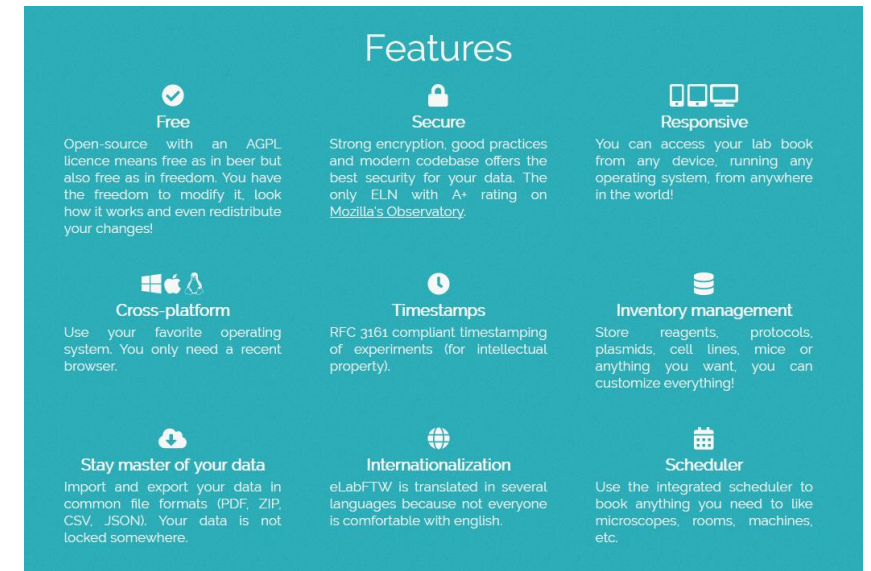


Replacement of paper laboratory books with an electronic version

- Applicable in research and teaching (laboratory exercises)
- Main purpose: *taking notes, limited data storage, organization*
- Metadata documentation
- Lab management
- Collaborative work tool



- Designed by researchers for researchers
- Hosted at central computer facility at TU Graz.
- Free open source software, freely modifiable (AGPL license), highly customizable.
- Runs on all common operating systems.
- Powered by PHP/MySQL in Docker containers.
- Web-based application.



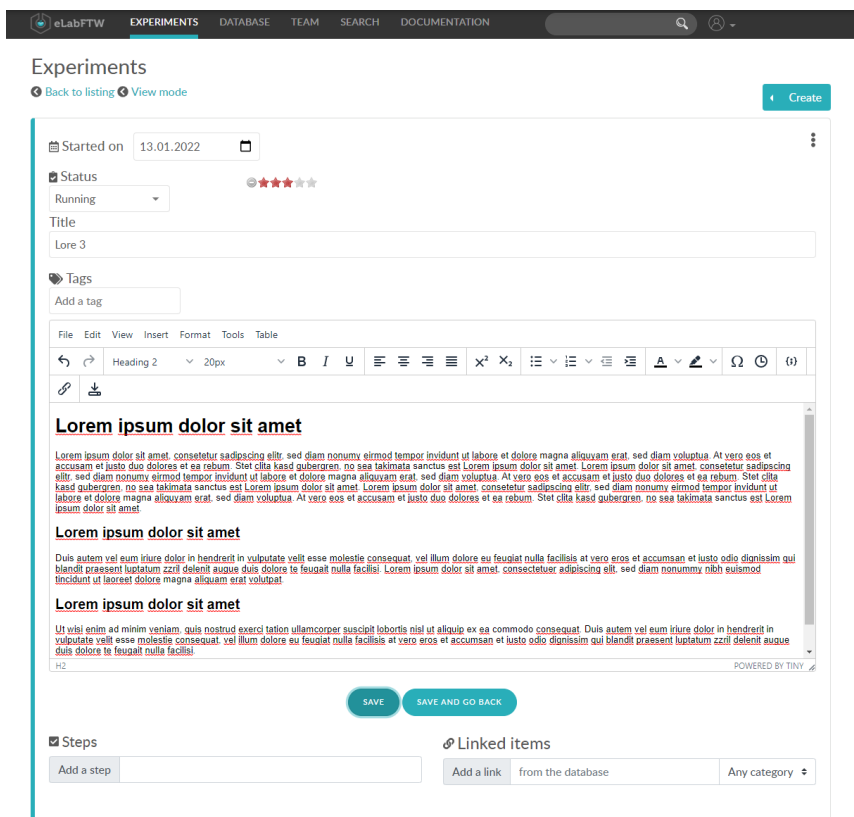
Features

- Free**
Open-source with an AGPL licence means free as in beer but also free as in freedom. You have the freedom to modify it, look how it works and even redistribute your changes!
- Secure**
Strong encryption, good practices and modern codebase offers the best security for your data. The only ELN with A+ rating on [Mozilla's Observatory](#).
- Responsive**
You can access your lab book from any device, running any operating system, from anywhere in the world!
- Cross-platform**
Use your favorite operating system. You only need a recent browser.
- Timestamps**
RFC 3161 compliant timestamping of experiments (for intellectual property).
- Inventory management**
Store reagents, protocols, plasmids, cell lines, mice or anything you want, you can customize everything!
- Stay master of your data**
Import and export your data in common file formats (PDF, ZIP, CSV, JSON). Your data is not locked somewhere.
- Internationalization**
eLabFTW is translated in several languages because not everyone is comfortable with english.
- Scheduler**
Use the integrated scheduler to book anything you need to like microscopes, rooms, machines, etc.

[eLab Login](#)



Documentation of research results and tasks - EXPERIMENTS



The screenshot shows the 'Experiments' page in eLabFTW. It features a sidebar with fields for 'Started on' (13.01.2022), 'Status' (Running), 'Title', and 'Tags'. Below this is a rich text editor with a comprehensive toolbar including options for bold, italic, underline, text color, background color, and font size. The main content area contains placeholder text ('Lorem ipsum dolor sit amet'). At the bottom, there are 'SAVE' and 'SAVE AND GO BACK' buttons, and a 'Steps' section with 'Add a step' and 'Add a link' options.

← *Modification in the graphical text editor*

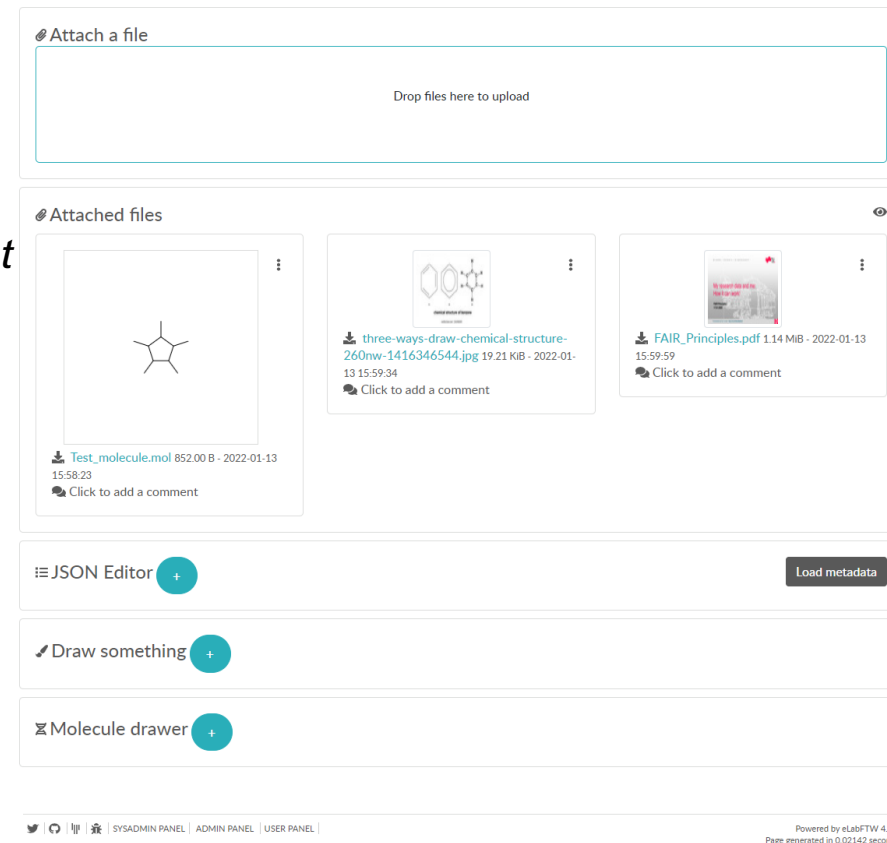
← *Permission management*

← *Status and time stamping available*

Attach files with preview →

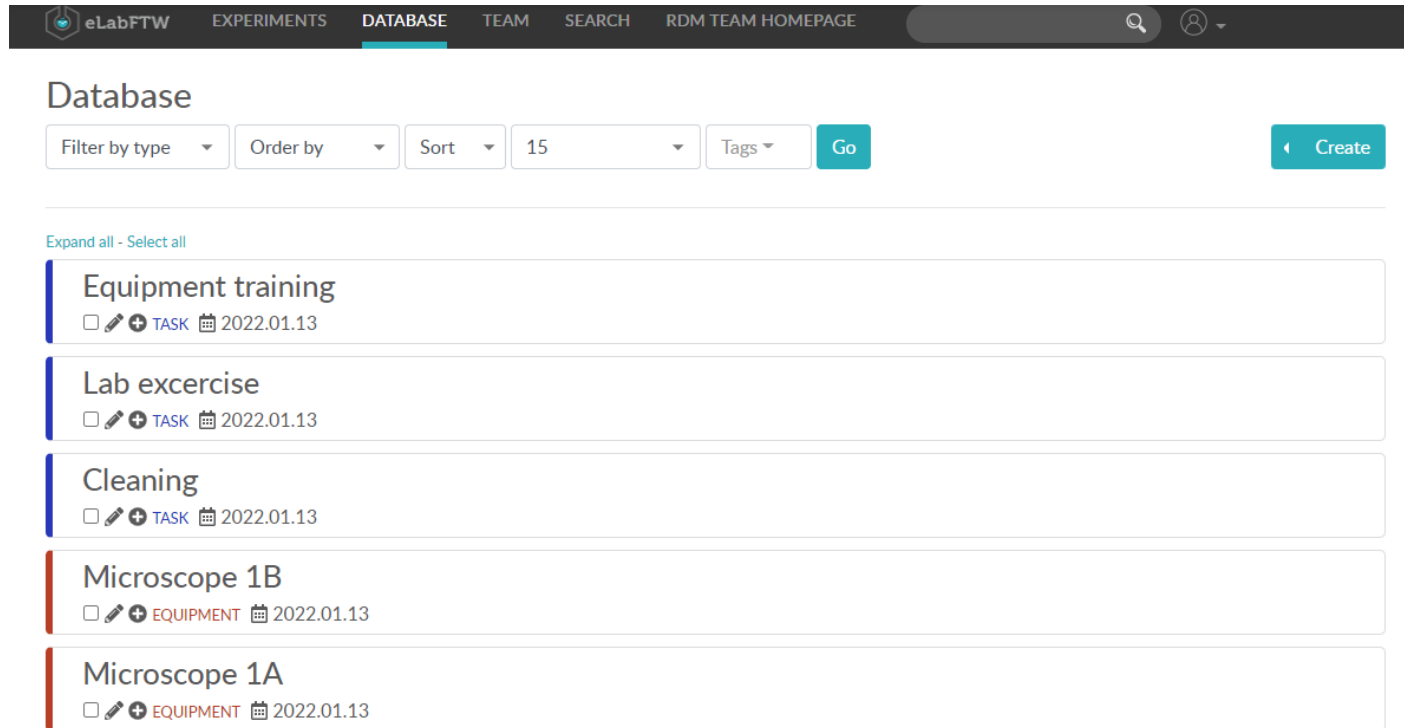
Add metadata via JSON editor →

Create sketches and molecules directly →



This screenshot shows the file management interface. At the top is an 'Attach a file' section with a 'Drop files here to upload' area. Below it is the 'Attached files' section, which displays three files with their respective thumbnails and metadata: a chemical structure (Test_molecule.mol), a chemical structure image (three-ways-draw-chemical-structure-260nw-1416346544.jpg), and a PDF document (FAIR_Principles.pdf). Each file has a 'Click to add a comment' link. At the bottom, there is a 'JSON Editor' button with a plus sign and a 'Load metadata' button.

Inventory management with freely definable templates - DATABASE



The screenshot shows the 'Database' section of the eLabFTW interface. At the top, there is a navigation bar with 'eLabFTW', 'EXPERIMENTS', 'DATABASE' (highlighted), 'TEAM', 'SEARCH', and 'RDM TEAM HOMEPAGE'. Below the navigation bar, there are several filters: 'Filter by type', 'Order by', 'Sort', '15' (items per page), 'Tags', and a 'Go' button. A 'Create' button is also visible. The main content area lists five database items, each with a checkbox, edit icon, plus icon, and date:

- Equipment training (TASK, 2022.01.13)
- Lab exercise (TASK, 2022.01.13)
- Cleaning (TASK, 2022.01.13)
- Microscope 1B (EQUIPMENT, 2022.01.13)
- Microscope 1A (EQUIPMENT, 2022.01.13)

← Create/Share database items

← Different types of items individually configurable

← Like instruments, chemicals, tasks, guides, data sets, media, ...

← Types are defined by Admin

← Items can be bookable (scheduler) or non-bookable

← Creation very similar to experiments

Member overview and item booking options - TEAM

Team

SCHEDULER INFORMATION TEMPLATES EMAIL

Select an equipment ▾

today Jan 10 - 16, 2022 week list month

MON 1/10 TUE 1/11 WED 1/12 THU 1/13 FRI 1/14 SAT 1/15 SUN 1/16

6am
7am
8am [Equipment training] Training MC 1A (Alexander Gruber)
9am [Microscope 1A] Examination Sample XXXY2A (Alexander Gruber)
10am
11am
12pm
1pm
2pm
3pm
4pm [Cleaning] Cleaning Room P00421 (Alexander Gruber)
5pm
6pm
7pm
8pm
9pm
10pm
11pm

SYSADMIN PANEL | ADMIN PANEL | USER PANEL

Powered by eLabFTW 4.2.2
Page generated in 0.01794 seconds

Feature	User	Admin	SysAdmin
Modify Profile Information	X	X	X
Use ToDo-List	X	X	X
Create/Edit/Delete Experiments	X	X	X
Upload to Database	X	X	X
Add Users		X	X
Create Groups		X	X
Add Database item types		X	X
Define Experiment Status		X	X
Create Teams			X
System Settings			X
Security & Email settings			X

← Schedule tasks, manage experiment templates

← Built-in email system

↑ 3 types of actor status

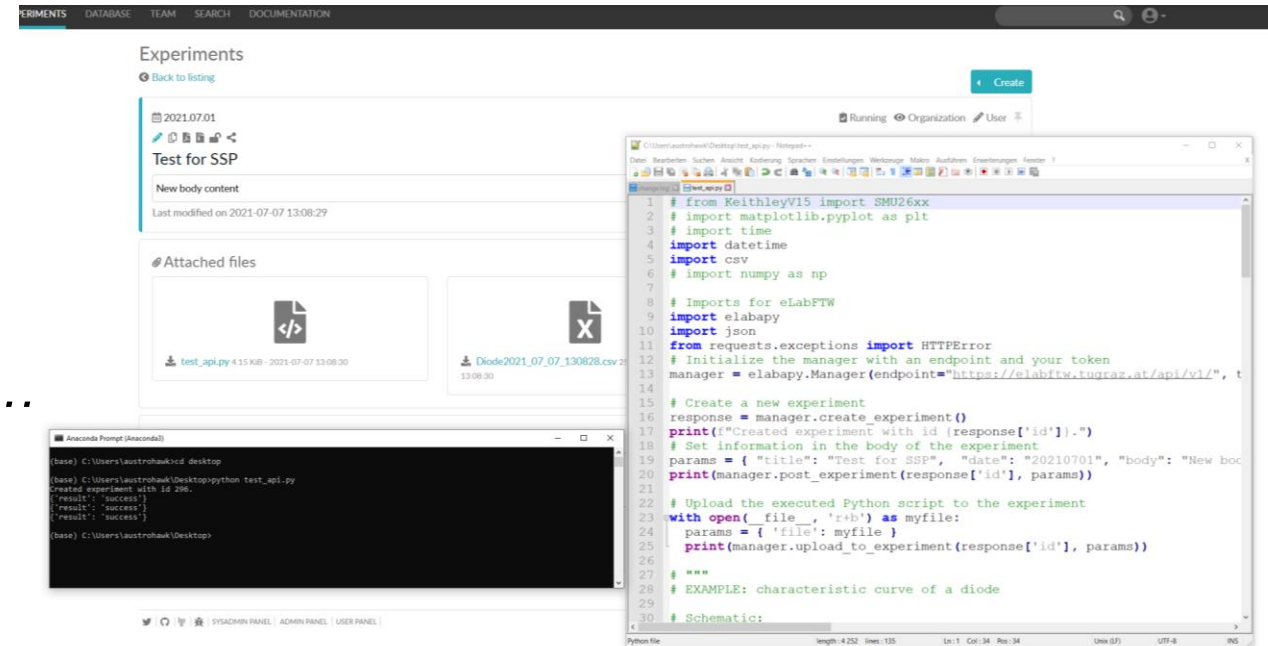
↑ Subset of teams: groups

↑ User can be part of multiple-teams



Access via API (Python scripts)

- *eLabFTW access by web browser or **API***
- *Scripts for various tasks possible*
- *Create experiments, items, tags, templates, ...*
- *Upload/Download files*
- *Get backup of experiments and lists of team members*
- *eLabFTW API [documentation](#)*



Contact: rdmteam@tugraz.at
Visit our website: rdm.tugraz.at

A large graphic element consisting of a dark blue and black triangular shape with a starry, nebula-like pattern, pointing to the right. The text 'WE BRING VALUE TO YOUR DATA' is written in white and red inside this shape.

**WE BRING
VALUE TO
YOUR DATA**

**RDM
TEAM**

Your partner for professional
**RESEARCH
DATA
MANAGEMENT**
at Graz University of Technology

Exercise: Institute contest



Who has the best ice cream recipe?

- Main functions of eLabFTW are demonstrated with a common example
- Is first shown and then you can try out
- Background: Documentation of a contest about ice cream recipes
 - List of possible recipes available
 - Feel free to use your own creations

Goal:

- Learn how to use eLabFTW
- Get an impression what is/could be possible