

eLabFTW Guide

(User)

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1) Role

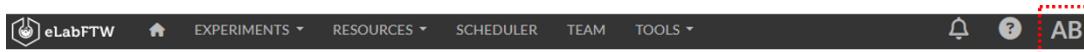
“Users” are the main user group in eLabFTW and they can all use the same range of functions that the tool offers. To be a user at all, you have to be assigned to at least one team in eLabFTW. It is therefore possible to be in several teams at the same time, but it is advisable to keep this number as low as possible. As a user in several teams, there are special points to consider.

2) Get Access

You can access eLabFTW via elabftw.uni-graz.at and can log in there using Single-Sign-One. You can access it with any device that has internet access and a web browser. If you register for the first time and do not have an account yet, you will be added to the standard team (**UNI Graz General**). If you want to be added to an existing team, the admin of the desired team can take on this task or the SysAdmins (RDM Team, rdmteam@tugraz.at). The SysAdmins will then take over this step. The next time you log in, you will see an overview of the teams you are a member of. You can then select the team and log in.

Note: All members of UNI Graz automatically have access to eLabFTW via SSO. If you have members in your working group or consortium from outside of UNI Graz and you want them to use the electronic lab notebook as well, please contact your team admin or Sysadmins and ask them to create an account. The new external user must then click the “Forgot password?” button within the regular login terminal to set their own password and then set up a second factor during their first login.

3) User menu



The icon on the far right of the header deals with the user's personal menu. Here you can see directly in which team you are currently logged in, get access to your tool settings depending on your role and log out of eLabFTW. In addition, there are the following helpful options in the drop-down menu:

1) „Switch Team“

If you are a member of several teams, you can switch directly to another team here. You will then return to a selection window and choose your available teams.

2) Dashboard

This button will take you to an overview of your experiments, resources and next bookings.

3) My Profile

"My Profile" is a very important window for you, as it gives you a complete overview of all the teams you are in and a list of the groups you are also a member of. In addition, you can see who is also present in these groups and always know with whom you share your experiments. You also get statistics about the status of your experiments. In addition, you have further tabs here which give you an overview of all your uploaded attachments and also direct access to the import/export area.

4) ToDo List

The "ToDo" list is a nice feature to leave yourself short notes as a reminder. In addition, you can keep track of open "steps" from experiments and resources entries for yourself or your team. You can also access this via Short Cut (see Settings).

5) Import

If you want to import entries from other teams or other eLabFTW instances, you can do so in this area. Please note that you can only import files of the type .eln and .csv here. The entries will then be assigned to you as the creator.

6) Export

If you would like to export all your entries in the experiments and resources section or the templates in these sections in one go, you should use this option (Figure 1). You can also select the desired format and certain additional options. Depending on the application, you should select the appropriate file type.

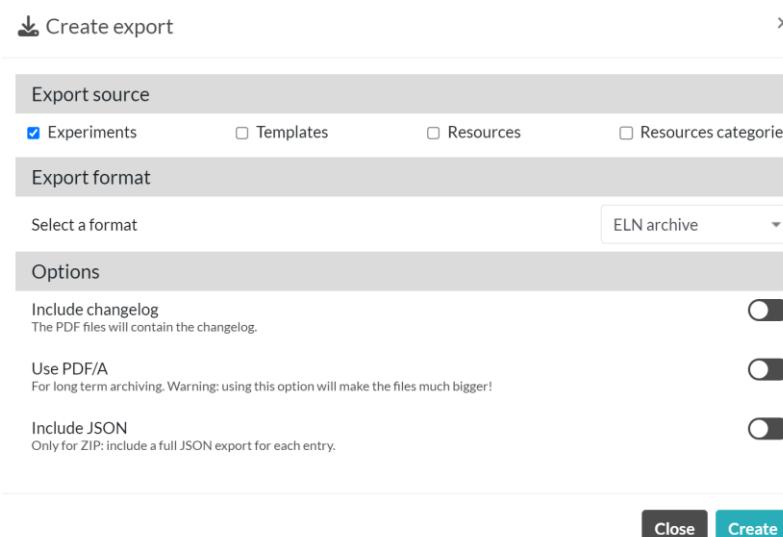


Figure 1: Data Export via User menu

Depending on the section in eLabFTW, different export formats are available for one or more entries. This allows you to use your documentation externally or, for example, as additional information for publications or audits. Below you will find an overview of the available export formats and a short description:

User menu: Export window (with additional options)

- ELN archive Exchange format (JSON-LD) for export/import of datasets²
- JSON file Information about the entry in JSON format (machine readable)
- PDF document Regular PDF format (no attached files)
- ZIP archive Regular ZIP format, entire entry with all files

Experiment/Resource Export options: Single entry view mode

- PDF file Regular PDF format (no attached files)
- Long term storage PDF PDF/A, an ISO-standardized version of the PDF format¹
- ZIP Archive Regular ZIP format, entire entry with all files
- Long term storage ZIP Regular ZIP format with PDF/A included¹
- ELN Archive Exchange format (JSON-LD) for export/import of datasets²
- CSV file Regular CSV format
- QR codes QR as .png type for printing
- JSON Information about the entry in JSON format (machine readable)

Experiment/Resource Export options: Overview mode

- ELN Archive Exchange format (JSON-LD) for export/import of datasets²
- ZIP Archive Regular ZIP format, entire entry with all files
- CSV file Regular CSV format
- PDF file Regular PDF format (no attached files)
- QR codes PDF Multiple QRs as PDF type for documentation/printing
- JSON Information about the entry in JSON format (machine readable)

¹ PDF format designed for long term storage and includes changelog, but transparent PNG will appear with a black background. This PDF format is also used for timestamping.

² Designed to promote the The ELN Consortium and allows to exchange one or more entries between eLabFTW instances and users.

7) Settings

The User Panel (Figure 2) is the first and most important place to go to configure how you experience eLabFTW. Especially when logging in for the first time, you should familiarise yourself with this menu before proceeding. This area contains several sub-areas, which are explained below.

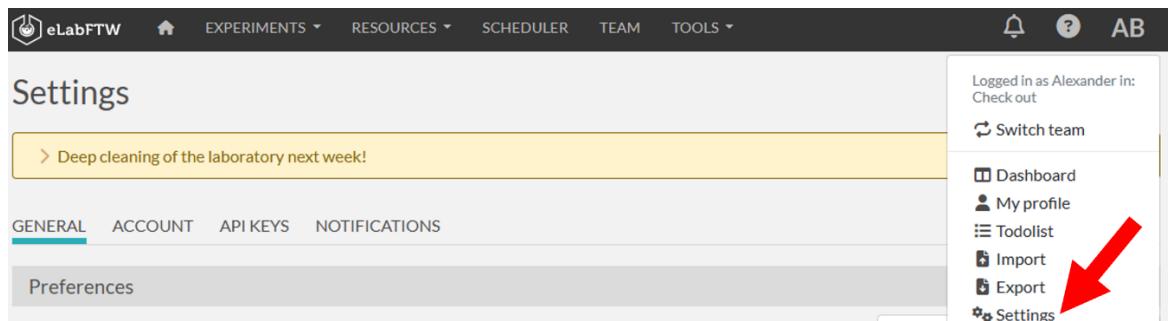


Figure 2: User menu (Settings)

General

In the first tab of the Settings, you can select your preferences for certain aspects of the tool. eLabFTW currently distinguishes between 5 areas:

Preferences: Here you can set the language in which eLabFTW is displayed for you.

Display: You can set how many entries are displayed simultaneously and in what size. You can also switch between lists and table view. The order of the entries displayed can also be changed using various parameters. Which page should be displayed first when logging in (e.g. Dashboard) can be set here.

Scheduler: Select whether the calendar shows weekends or not.

Keyboard Shortcuts: Five shortcuts are available for free assignment, but can also completely be disabled. The "ToDo" list and "Search" are particularly helpful here.

PDF configuration: You can export entries as PDF and there are also some export settings available. Among other things, the format and language-specific fonts in Asian.

Miscellaneous: If you only want to write in Markdown, you can completely deactivate the Rich Text Editor here. Default settings for viewing/writing rights for your new experiments can also be set. You can also set whether your personal entries should always be displayed, regardless of the team you are currently logged in to. In addition, you can set which team groups (the groups of a team) are available for rights management. You can limit the selection to the current team, or only the groups in which you are a member, or all groups that have been created in the instance.

Account

In the account area, you can enter your ORCID-ID and select a passphrase to cryptographically sign experiments or resources. **For members of UNI Graz, two-factor authentication runs directly via SSO and no changes are necessary here. For external users, two-factor authentication is enforced and cannot be deselected.** First and last name are also obtained directly from the UNI Graz database.

API Keys

Accessing eLabFTW via the browser interface is not the only option. APIs can also be used and one or more API keys must be generated for this purpose. This is also done directly in the Settings. Here you name your key, set whether it should have read-only or read/write rights and generate it directly. **It is then only displayed once for you and you have to save it externally.** The entire documentation on APIs in eLabFTW is also available [here](#) via a link. You can use this key in combination with a Python script and e.g.: add experiments automatically or append attachments.

Notifications

Certain notifications for events in eLabFTW can be set here. This means whether you want to receive these notifications by email or only in the browser or not at all. Depending on your role, different options are available.

4) Notifications and Help



On the right side of the header you will find two more symbols. The **bell** and the **question mark**. The first one shows the overview of your open notifications and the second one shows a variation of links to the open source community of eLabFTW. These are fellow stakeholders outside of UNI Graz. An important point is the "**Support**" section, which links to the eLabFTW support page on GitHub. [Here](#) you will find the manuals and FAQ for eLabFTW.

5) Dashboard

The Dashboard is (as default setting) your starting point in eLabFTW (Figure 3). Here you get an overview of your experiments, your resources and which bookings have been made by you in the calendar for the future. You can also create new entries directly from this view. If you prefer to have the experiments or resources as the start page, you can change this via the settings in the User menu. In addition, you can also make a pre-selection of entries in the experiments and resources area using the categories and statuses that have been created. By clicking on the category or status in the respective area, only the relevant entries are displayed.

When you click on 'Experiments' or 'Resources', a drop-down menu appears, offering a range of options for the respective area. Both areas have a quick search function, which makes it easier to search the areas for a specific term. **Note: The resources area also offers the option of selecting all bookable resources.** The other options are explained in the following points.

1. Here you can choose whether you want to see only your personal entries on the following page, entries that are visible to the entire team, or entries that have been activated for the entire instance.
2. Experiments and resources have separate options for templates, categories, and statuses for the respective areas. Depending on the team admin's configuration, you can create and change categories and statuses yourself or only use pre-created parameters.

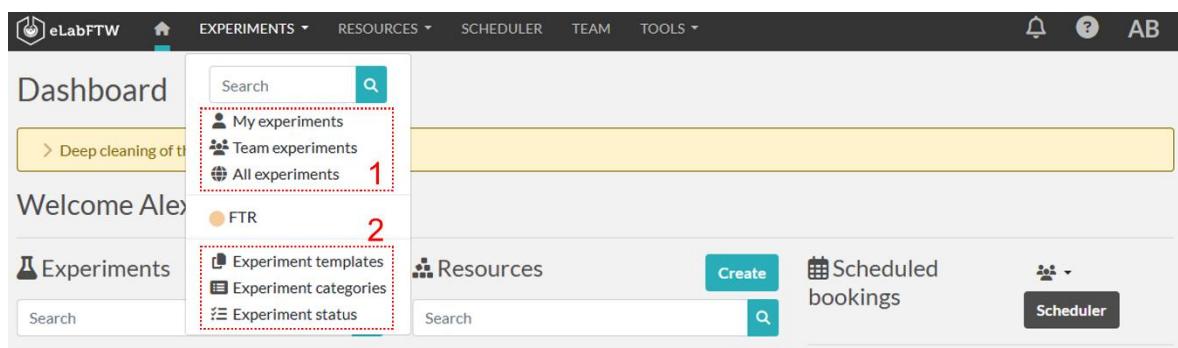


Figure 3: Dashboard

1) Experiment/Resource Templates

Custom templates can be created for both experiments and resources. This takes you to an overview page that displays all experiment/resource templates available to you (Figure 4 & Figure 5). The search and filter options match those available under the experiment and resources overview. You can also create new experiment/resource templates here and pin them so that they are immediately available when creating new experiments. When you create a new template, you will be able to predefined some areas of an experiment/resource entry, but others are missing. These fields are added as soon as a new entry is created from the template. **It is also possible to transfer the ownership to another user and import already existing template in .eln format into your own collection.** Templates can play an important role when it comes to documenting experiments / managing resources with a similar structure. This not only saves time but can also be of great advantage for reasons of reproducibility. Laboratory exercises are another use case where templates can be very supportive. In the experiment/resource entries section, you can access a favourite selection of templates using the "Create" button. To do this, you must first pin your preferred template using the pin in the respective template section.

- 3.** The “Scope” button ensures that there is a basic pre-filtering of which templates are displayed, i.e., self-created, team-shared, or instance-wide templates.

The screenshot shows the 'Experiment templates' page in eLabFTW. At the top, there's a navigation bar with 'EXPERIMENTS' selected. Below it, a search bar and filter options ('Filter category', 'Filter status', 'Filter owner', 'Tags') are visible. The main area displays a table of templates. In the 'Scope' column, the 'Team' option is selected and highlighted with a blue box and the number '3'. The table includes columns for Date, Title, Next step, Category, Status, and Tags. One row is shown in detail: Date 2025-11-16, Title 'Measurement of temperature distribution in laboratories', Next step 'Book Thermo...', Category 'group work lab temperature', Status 'Everything', and Tags 'Alexander Bardel'.

Figure 4: Template overview

- 4.** Here you can specify who has the right to view the template and thus also use it for new experiments/resources, and who has the right to modify the template itself. Modification of the template itself should be reserved for as small a group of people as possible.
- 5.** These options allow you to assign a preset of read and write permissions for experiments/resources created from this template. These options can generally be changed after a new experiment has been created. If you also activate the “Lock down” function, these settings cannot be changed by users after the new experiment/resource has been created. Only admins can change the rights afterwards, this also applies to entries that belong to you. Please use this function with caution.

The screenshot shows the 'Template editor' page. It starts with a 'PERMISSIONS' section. Under 'Permissions for the template', there are two rows: 'Visibility' (radio buttons for 'Only owner' and 'Groups') and 'Can write' (radio buttons for 'Only owner' and 'Groups'). A red box labeled '4' surrounds this section. Below it is another section titled 'Permissions for the derived entry'. It contains a note: 'Entries created from this template will inherit these permissions. If they are locked down, the permissions will not be modifiable by Users, only Admins.' Under this note are two more rows: 'Visibility' and 'Can write', both with 'Only owner' selected. At the bottom of this section are two toggle switches: 'Lock down read permissions' and 'Lock down write permissions', both currently off. A red box labeled '5' surrounds the entire 'Permissions for the derived entry' section.

Figure 5: Template editor

2) Experiment/Resource Categories

If enabled by the admin of the team, you can create and modify any number of categories for your experiments/resources here (Figure 6). If editing is disabled, you can at least view categories when creating and editing entries. The option is greyed out in this case. In combination with the templates, you can combine these for entries and, for example, use several customised templates for different microscope types for a category called “Microscope”.

Name	Color
FTR	
Experiment	
Simulation	

Figure 6: Experiment/Resource categories

3) Experiment/Resource Status

If enabled by the admin of the team, you can create and change any number of statuses for your experiments/resources here (Figure 7). If editing is disabled, you can at least view categories when creating and editing entries. The option is greyed out in this case. Since separate statuses can exist for experiments and resources, you have the option of optimising them for the specific purpose of the respective sections.

Name	Color
Running	
Success	
Need to be redone	

Figure 7: Experiment/Resource status

6) Experiments

The central element of eLabFTW is the documentation of all relevant additional information (metadata) on experiments, laboratory exercises and basically all research activities. For this task, the button "Experiments" is available in the header and forwards to the overview of all experiment entries available to you. In addition to this overview, this view also provides you with a "Quick Search" bar, filter options and a sorting function (Figure 8 & Figure 9). These functions are described below:

1. In eLabFTW there is no classical folder system, but entries are tagged for easier finding. Nevertheless, in combination with projects, which can be created as entries in the resource section, and the targeted use of tags plus categories and status, you can create a certain structure. Since it will come to an accumulation of certain tags in the use, you can store your favourite tags here. You also have access to your ToDo's here, i.e. all open steps that occur in your entries.
2. If you want to select all entries for further options or expand the editor area of all entries on the overview page, you can do it using these two buttons.
3. Here you can use the "Scope" button to decide whether you only want to see your own experiments or those of your team or the entire instance and quickly switch between list and table view. eLabFTW also offers the possibility to filter and sort the experiment entries according to a number of different quantities.
4. The "Search" bar searches all elements in the "Experiments" area for the term entered. You do not have to be careful whether it is a tag, full text or heading. If the search term occurs in the content of the entries, the corresponding experiments are displayed. Search is a very powerful tool in eLabFTW. **Remember:** In eLabFTW there is no folder structure but categorisation is done with tags. This means that you can search for certain tags in the individual areas. The real strength lies in the extended fields, which allow a refined search in groups or for individual users. In addition, there are further specialised fields and also a search query if desired.
5. To create a new experiment entry, the "Create" button comes into action. This button is divided into two parts, although it is difficult to recognise. If you click on the right part ("Create"), a window opens and you can decide whether you want to create the default template or an empty experiment. The small arrow on the left side of the button offers the possibility to access the costume templates that have been created or shared and to create an experiment from them, also to import experiments from files.
6. With the filter option you can filter the available entries according to certain parameters. You can filter by the status and owner of the experiments, but also for whom the entries are visible or which group of the team has access to the entries. The number of results can also be

limited during filtering and the included tags can be set. If you want to see archived entries, you still have to mark the corresponding checkbox.

Figure 8: Experiments overview

- 7.** If you have already selected one or more entries, you can make certain changes to all entries at the same time. This concerns the status, links or the read and write permissions of the entries. Also, the export of several entries is possible. In addition, you can also immediately lock, unlock, timestamp, archive, unarchive, delete or even restore entries.

Figure 9: Filter and select Experiments

When you create a new experiment, a new window opens, which may have different contents depending on the templates used. The window has been separated into three figures for this manual and are visible in Figure 10, Figure 11 and Figure 12. The areas that appear in each experiment are explained in the next points:

- 8.** A category and a status can be set, but is not necessary as long as it has not been configured. You can give your entry any title you wish and different entries can also have exactly the same title, as each entry is given a unique ID which is automatically assigned and which uniquely identifies the entry. On top of that, a custom ID can also be created.
- 9.** Different icons here give you useful functions for your entry (from left to right):
 - **Eye/pen:** Switch between viewing and editing mode
 - **Sheets:** Duplicate entry
 - **Add signature:** It is possible to ‘sign’ the current state of an entry. When you perform this action, the entry is cryptographically signed at the time of signing and added to the attachments as an archive file.
 - **Timestamping:** Associate certain date and time to a digital document, which are legally valid.
 - **Blocks:** Add entry to a blockchain
 - **Download the entry:** see Export
 - **Pin:** Favourite entry
 - **Lock:** lock/open entry for editing (only available by the owner)
 - **Request action:** You can request a user to perform a specific action on an entry. This is useful if you don't have the option itself or if a policy clearly defines the course of action.
 - **Three dots:** Transfer of the ownership status, track changes and archive/unarchive entry.
- 10.** You can set the start date at any desired date. Below that, you assign tags that replace the classic folder structure of known systems. Here you can use meaningful terms that relate to your experiment, e.g. project number, abbreviations, methods, etc. Tags can be predefined and moderated by the admin, but can also be created by the users themselves.
- 11.** In the rich text editor, you can describe your experiment and also record all the results. You have different formatting options, integration of graphics, tables, links, code and much more.

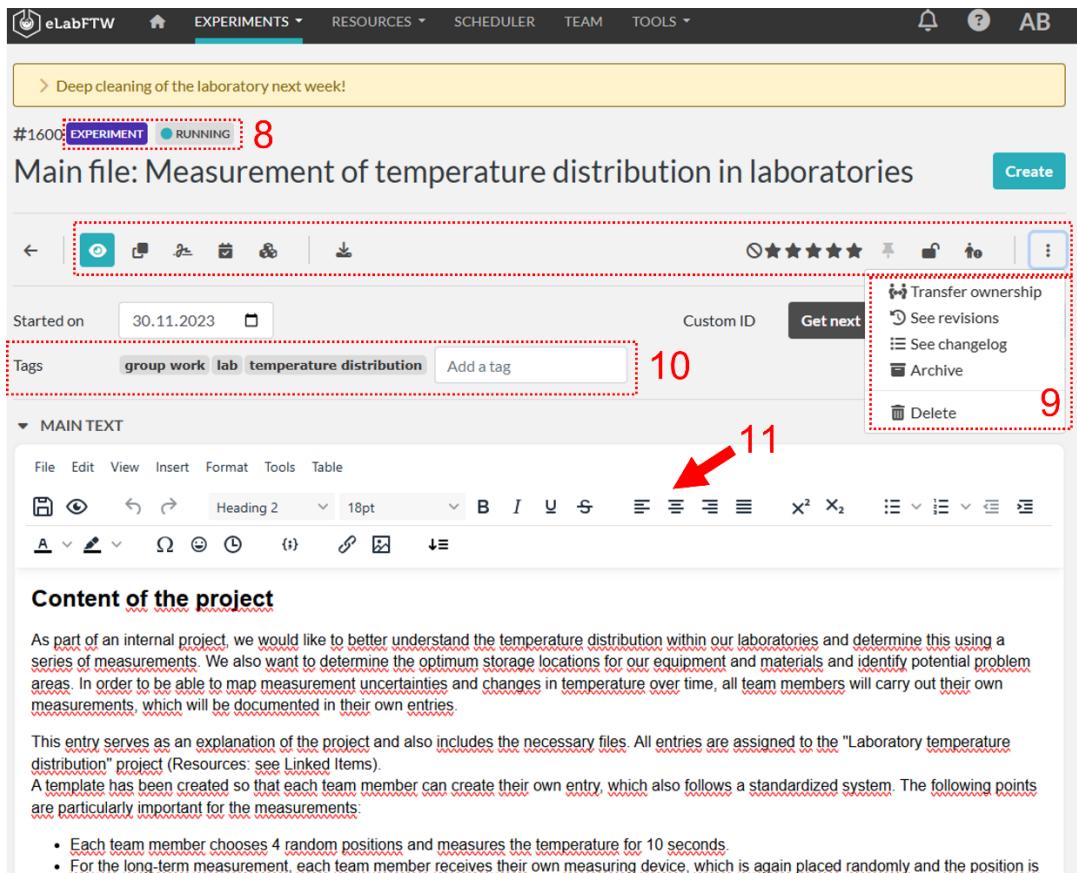


Figure 10: Experiments editor mode (Part 1)

12. Below the rich text editor, you can add interactive metadata fields, which you can organise in several groups and at the same time can have different functions like a dropdown menu or checkboxes. The "Load fields" button allows you to import the metadata fields of an existing entry and use them directly (see also [Metadata](#)).
13. You can add all kinds of files to your entry. Currently there are no known restrictions on the file type, but the size is limited to 100 MB. Graphics of the type .png and .jpeg can also be transferred directly into the rich text editor. You can drag and drop files into the field or click on it and the familiar selection editor opens.
14. Experiments go through different steps and you can name these steps here. The advantage here is that you can mark them as done/open and they will show up in your "ToDo" list. **Steps can also be given a deadline and added to the notifications as well as directly as a link in the editor area.**

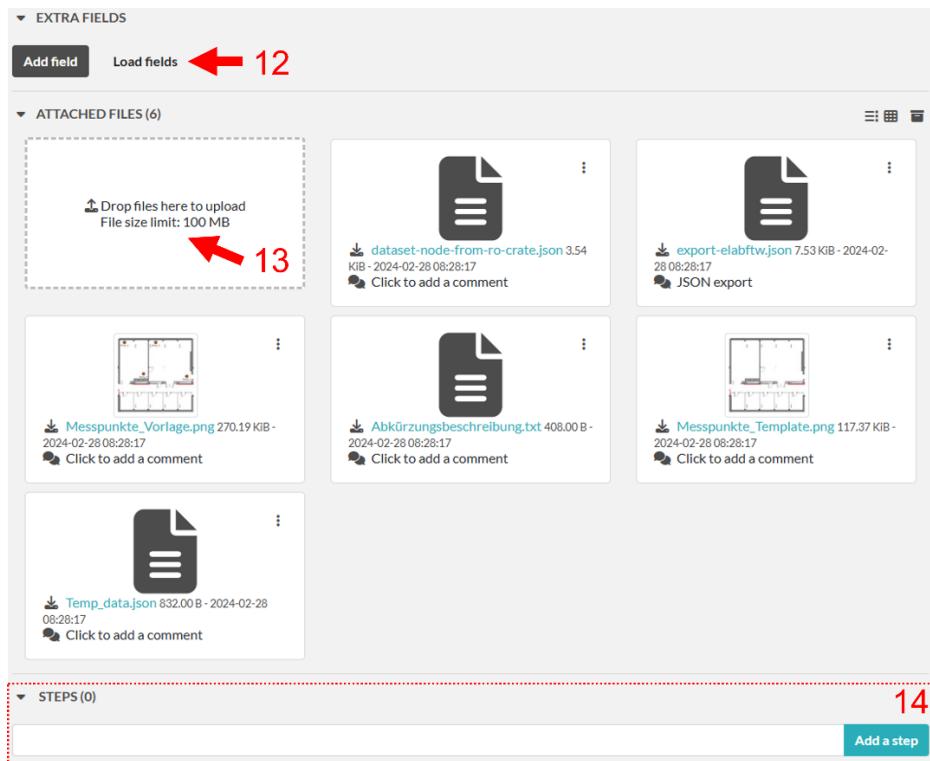


Figure 11: Experiments editor mode (Part 2)

15. The spreadsheet editor is currently available as a **beta feature** and is not yet fully developed. It can be used to edit .csv, .ods and .xlsx files directly. Please note that this editor only supports basic arithmetic functions and may still contain bugs.
16. Experiments rarely stand alone or require no additional resources. You can add existing experiment entries as well as resource entries to your entry and thus create links to quickly get to other relevant entries. This function works in both directions and so the other entries also receive a link. Elements from the chemical database can be linked in the Compounds area. You can find more detailed information in Chapter Compounds.
17. Containers can be created for the quantitative and local mapping of entries. You can find more detailed information in Chapter Inventory & Containers.
18. It is important to check the read and write permissions of the entry. You have set default settings in your user panel that are automatically assigned here, but can be changed manually. **You can share an entry at different levels at the same time. In relation to the entire instance, several teams, different groups of teams and individual users.**
19. There are two editors available that allow you to create additional information in special formats directly in your experiments. With the "JSON editor", metadata can be stored as machine-readable information and can also be edited directly in eLabFTW. In the "Draw Something" editor you can easily make sketches and make additions in uploaded .png and .jpg.

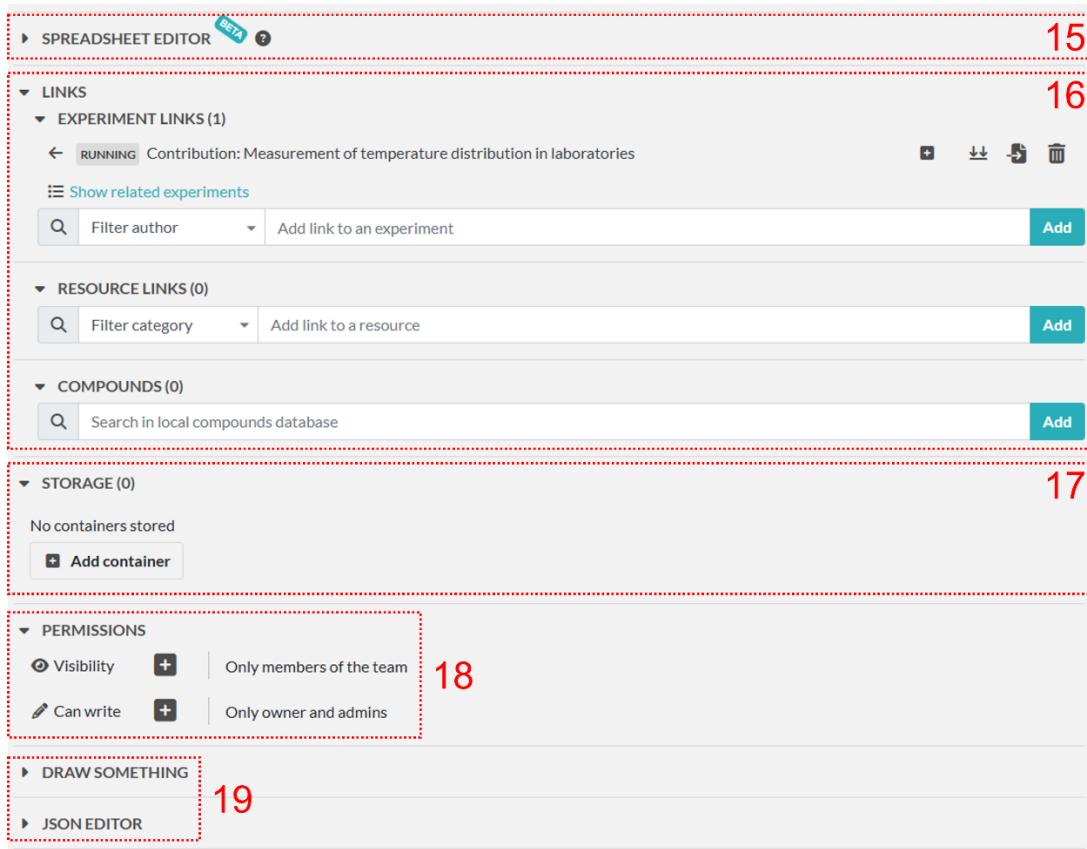


Figure 12: Experiments editor mode (Part 3)

When you are finished with your documentation, you can save it at any time and edit it later. In any case, you can switch from the editing mode to the viewing mode and check the entry. For this manual it is again divided into two figures and visible in Figure 13, Figure 14 and Figure 15:

- 20.** The ID that is assigned internally to an entry can be found here. It is the same digit that can be found at the end of the URL of an entry. This ID is not to be mistaken with the eLabFTW UniqueID, which is truly unique and not a running number like this ID.
- 21.** This area basically has the same functionality as in edit mode. It is important to note here that the affiliation of the entry to a certain team can be found beneath. **It is important to note that clicking on the pen icon activates an exclusive edit mode that actively prevents multiple people from editing an entry at the same time.** When you return to view mode, the document is released for editing again.
- 22.** In view mode, the rich text editor corresponds to the main text area. If you open individual entries in the experiment overview, this area is displayed as well. You will also find the creator and the eLabFTW UniqueID of the entry in the lower right corner.

The screenshot shows the eLabFTW interface in experiment view mode. At the top, there's a header with the eLabFTW logo, navigation links for EXPERIMENTS, RESOURCES, SCHEDULER, TEAM, and TOOLS, and user account information. Below the header, a yellow banner displays a message: "Deep cleaning of the laboratory next week!". A red box labeled #1601 indicates the experiment ID, and a blue circle shows it is "RUNNING". A large red number 20 is overlaid on the text "Contribution: Measurement of temperature distribution in laboratories". A green "Create" button is visible. The main content area has a red dotted border and contains several sections:

- Started on 2023-12-07**
- Owner: Alexander Bardel**
- Team: Check out**
- Tags: bardel, group work, lab, temperature**
- MAIN TEXT**: A section titled "Note on the project" which describes the purpose of the internal project: "As part of an internal project, we would like to better understand the temperature distribution within our laboratories and determine this using a series of measurements. We also want to determine the optimum storage locations for our equipment and materials and identify potential problem areas. In order to be able to map measurement uncertainties and changes in temperature over time, all team members will carry out their own measurements, which will be documented in their own entries."
- Data overview and definition**: A section containing definitions for various temperature measurements: "Time: Recording time is indicated in seconds", "Temp_1: Temperature in Kelvin at measuring device 1 according to experiment set-up design", "Temp_2: Temperature in Kelvin at measuring device 2 according to experiment set-up design", "Temp_3: Temperature in Kelvin at measuring device 3 according to experiment set-up design", and "Temp_4: Temperature in Kelvin at measuring device 4 according to experiment set-up design".
- Files and function**: A section showing a list of attached files.

Figure 13: Experiments view mode (Part 1)

- 23.** All individual metadata fields that you have added are visible in this area and are displayed in groups (if assigned). Changes to the metadata fields can only be made in edit mode. In this mode the fields are not interactive.
- 24.** In the overview of all attached documents, you can get different information and make changes depending on the file type. This also includes changing the name, deleting, archiving/unarchiving and a content preview. It is also possible to display the files that have been stored as attachments, or to change the display layout.

The screenshot shows the eLabFTW interface in experiment view mode, focusing on the "EXTRA FIELDS" and "ATTACHED FILES" sections. Both sections are enclosed in red dotted boxes.

EXTRA FIELDS (red box 23):

- Fenster im Raum offen?
NEIN
- Standard Raum Temperatur
293 K
- Anzahl der Personen anwesend
2

ATTACHED FILES (5) (red box 24):

- dataset-node-from-ro-create.json 325 KB - 2024-02-28 14:26:58
Click to add a comment
- export-elabftw.json 7.91 KB - 2024-02-28 14:26:58
JSON export
- Übersicht_Messung.png 148.78 KB - 2024-02-28 14:26:58
Click to add a comment
- Abkürzungsbeschreibung.txt 408.00 B - 2024-02-28 14:26:58
Click to add a comment
- Temp_data_Bardel.json 832.00 B - 2024-02-28 14:26:58
Click to add a comment

Figure 14: Experiments view mode (Part 2)

- 25.** You can see your work steps and check them off or open them again. You will also always be shown how long ago the task was completed.
- 26.** Here you have an overview of all linked elements in the experiments, the resources and elements from the chemical database (compounds). You can jump directly to the elements and, in the case of resources entries, also directly to the scheduler. You can find more detailed information in the Chapters Inventory & Containers & Compounds.
- 27.** Containers can be created for the quantitative and local mapping of entries. You can find more detailed information in the Chapters Inventory & Containers & Compounds.
- 28.** At the comment line, you or your colleagues can leave comments on the entry, practical for feedback or messages. Below the comments you can find the eLabFTW UniqueID and the last time and date this entry was modified.

The screenshot shows the eLabFTW Experiments view mode with four numbered sections:

- 25:** STEPS (10) - A list of completed tasks with checkboxes and timestamps. Examples include "Infrared Thermometer VOLT CRAFT IR 500-125 im Kalender buchen completed 1 year ago" and "Messungen an den gewählten Orten durchführen completed 1 year ago".
- 26:** LINKS - A section showing experiment links and resource links. It lists "EXPERIMENT LINKS (1)" and "RESOURCE LINKS (2)", which include "EQUIPMENT Homematic IP Temperature and Humidity Sensor (Dummy)" and "EQUIPMENT Infrared Thermometer VOLT CRAFT IR 500-125". There are also icons for adding and deleting links.
- 27:** STORAGE (0) - A section showing storage details.
- 28:** COMMENTS (0) - A section showing comment details.

At the bottom right of the interface, there is a timestamp: "Last modified on 2024-02-28 14:39:02" and a unique eLabID: "Unique eLabID: 20240228-9dbaf8e3f652346d5ea36878329c8755fe473192".

Figure 15: Experiments view mode (Part 3)

7) Resources

The second very important area in eLabFTW can be accessed through the "Resources" button. The entries in this section can be seen as part of project and lab management, i.e. equipment, tasks, lab exercises. **An important difference to the experiments is that each an element in the "resources" can be a bookable item and be booked in the scheduler. Entries that are to have this function must be created under Resources.** The structure and functionality do not differ substantially from the Experiments overview (see Figure 8 and Figure 9).

Note: For example, you can create a "Project" category that contains all the important information about your research project. Experiments can add this entry to themselves and thus, in addition to the tags, you have the possibility to link experiments and resources elements to your project.

The creation of a resource entry works almost exactly the same way as in the experiments and can also be checked there (Figure 10). Just as with the experiments, it is possible to switch back to the view mode (Figure 13) after editing and check the entry (Figure 16):

1. Different icons here give you useful functions for your entry (from left to right):

- **Eye/pen:** Switch between viewing and editing mode
- **Sheets:** Duplicate entry
- **Calendar:** Jump directly to the scheduler and book the selected item
- **Letter:** Send a message to all users who have booked this resource.
- **Add signature:** It is possible to 'sign' the current state of an entry. When you perform this action, the entry is cryptographically signed at the time of signing and added to the attachments as an archive file.
- **Timestamping:** Associate certain date and time to a digital document, which are legally valid.
- **Blocks:** Add entry to a blockchain
- **Cart:** Place orders for this resource
- **Download the entry:** see Export
- **Pin:** Favourite entry
- **Lock:** lock/open entry for editing (only available by the owner)
- **Request action:** You can request a user to perform a specific action on an entry. This is useful if you don't have the option itself or if a policy clearly defines the course of action.
- **Three dots:** Transfer of the ownership status, track changes and archive/unarchive entry. You can also customise the booking and procurement parameters here.

2. Similar to the three points of experiment entries, there are the archiving functions and a changelog. The ownership of a resource entry can be transferred to another user. **A further and important point for the resource management are the options "Modify booking**

parameters" and "Modify procurement parameters" which will be explained in more detail in Figure 17 and Figure 18.

3. In the rich text editor (here main text) all options are available as with its counterpart in the experiment entries.
4. Similar to the previous point, here you get an overview of all attached files. You can also add a comment to them directly. Here you have an overview of all linked elements in the experiments and in the resources. You can jump directly to the elements and, in the case of resource entries, also directly to the scheduler. Containers can be created for the quantitative and local mapping of entries, and elements from the chemical database can be linked. You can find more detailed information in the Chapters Inventory & Containers & Compounds. It is also possible to comment on the entire entry. Practical for feedback or messages. An important point compared to the entries in the experiments is the "Can book" option. Here you can additionally set who has the rights to book the resource in the calendar. Read and write permissions behave identically to the experiments.

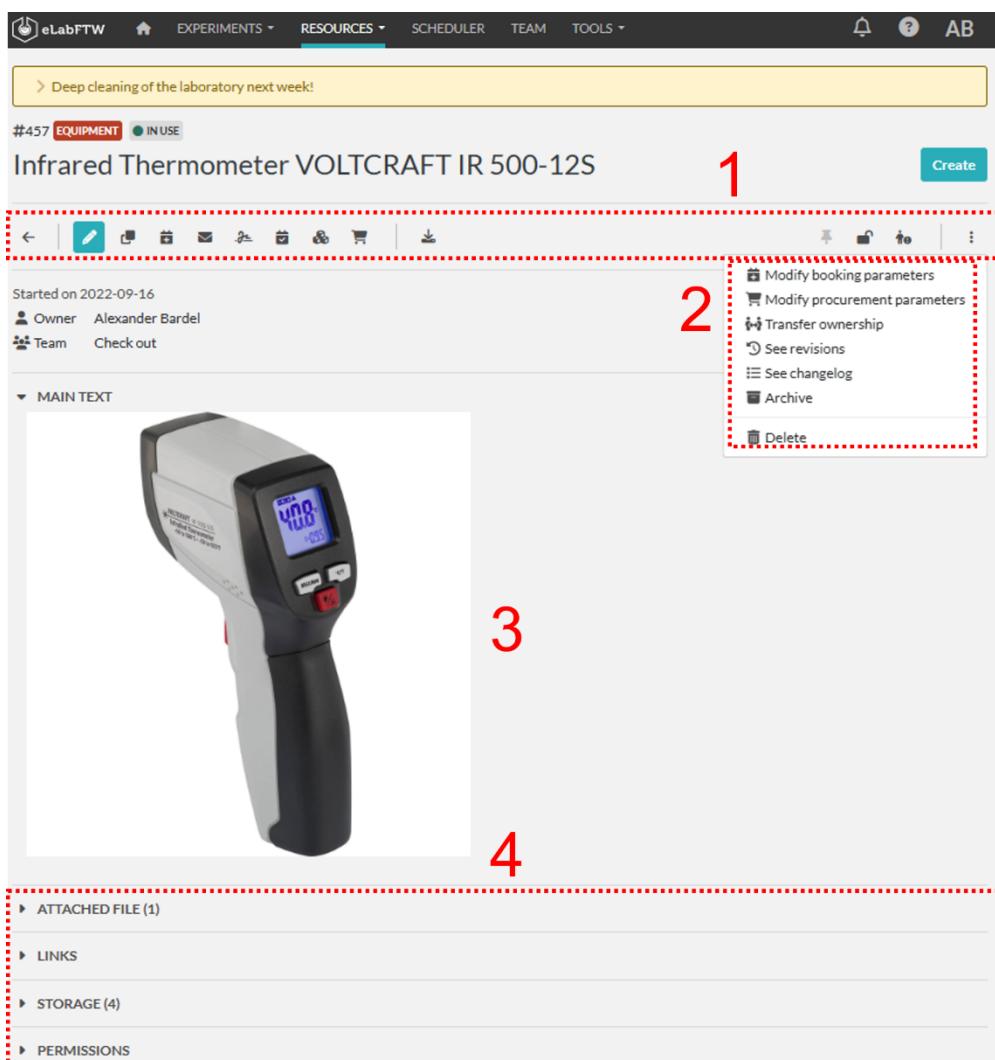


Figure 16: Resources view mode

By clicking on “Modify booking parameters” a pop-up window (Figure 17) opens and the following seven setting options are available:

- 1. Resource is bookable or not
- 2. Bookings of the same resource may overlap or not
- 3. Maximum duration of one booking slot
- 4. Maximum number of bookings per user for the future
- 5. Users can also book resources in the past or not
- 6. Bookings can be deleted by user or not
- 7. Maximum time before event start until which the booking slot can be deleted

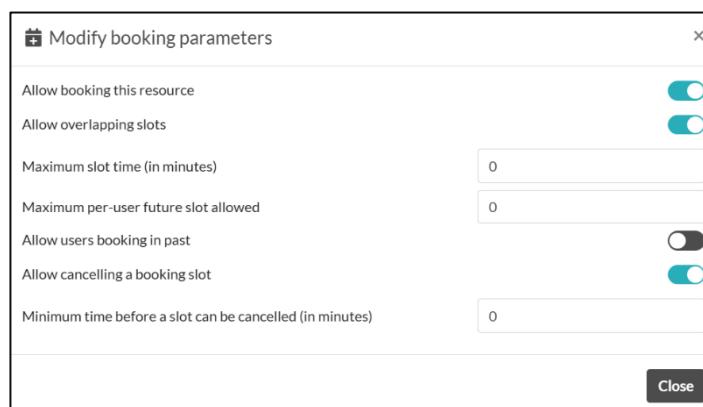


Figure 17: Resources view mode (Booking parameters)

By clicking on “Modify procurement parameters” a pop-up window (Figure 18) opens and the following five setting options are available:

- 1. Resource supports procurement or not
- 2. The size of the packaging
- 3. Price excluding tax
- 4. Price including tax
- 5. Currency of the transaction



Figure 18: Resources view mode (Procurement parameters)

8) Scheduler

Your team has its own calendar that can manage certain resources of your team in the form of a scheduler (Figure 19). Here, the resource entries of your team (not the experiments) can be filtered by category of resource item and individual resource element. Then you can book the item in the calendar with a short note. You can also display several items at the same time. This provides you with a simple tool for managing your laboratory equipment or exercise groups or planned activities in the team. You can also use the "Scope" button to pre-filter whether only your own resource entries or also the team or instance-wide resources should be available. A newly created calendar entry can also be edited (Figure 20).

1. Here you can set whether the scheduler should also display weekends or switch to a timeline view. You can also export all bookings within a certain period using the selected filters as a .csv file.

The screenshot shows the eLabFTW Scheduler interface. At the top, there is a navigation bar with links for EXPERIMENTS, RESOURCES, SCHEDULER (which is underlined), TEAM, and TOOLS. Below the navigation bar, a yellow banner displays the message: "Deep cleaning of the laboratory next week!". A note below it says: "Book a resource by clicking on the scheduler." On the left, there are filters for "Select a scope and search bookable resources" and "Select a resource". On the right, there are filters for "Select a scope and search for events" and "Filter events by owner". A red box highlights the "Export" button, which is located next to a "Scope" dropdown and a search icon. Below the filters, the date range "10 - 14 Nov 2025" is displayed, along with buttons for "day", "week", "list", and "month". The main area shows a grid for booking resources from Monday 10/11 to Friday 14/11, with hours 00, 01, and 02 listed vertically. A red number "1" is placed above the "Export" button.

Figure 19: Scheduler

2. This field contains your note for the booking, but you can change it by clicking on the text.
3. If the booking may be deleted, this area is available, which can be a deletion without notification or with message to a certain group of people. **The first option "Past and ..." is about users of the last two months and the upcoming month.**

Edit event 2

Comment
Measuring cycle 1 Save

Start time
25.10.2024 12:00 🕒

End time
25.10.2024 15:00 🕒

Bind an experiment
Search Attach

Bind a resource
Search Attach

Cancel booking slot
Add a custom message

Send to
 Past and future users who booked this resource
 Members of team Check out
 Members of teamgroup Internal Training
 Members of teamgroup Makerspace
 Members of teamgroup RDM Team Internal

Send message and cancel Cancel

3

Close

Figure 20: Scheduler: Edit event

9) Team

The team menu (Figure 21), contains various information about the team members as well as contact options, the scheduler and to create **procurement requests (beta function)**. There you can find four tabs:

Name	Email	ORCID
Alexander Bardel	alexander.bardel@tugraz.at	0000-0002-4244-3446

Figure 21: Team menu

Members: In this section you will get an overview of all members of your team. The role of the member and a contact option via email is also stored. Optionally, you can also look up the ORCID ID.

E-Mail: If you have a message that is relevant for members of your team, you can send it here to all members of the team or if you are also a member of one or more groups of the team you can limit it to this group of people.

Procurement requests: All procurement requests created for individual resources can be found here and can be commented on and deleted.

10) Tools

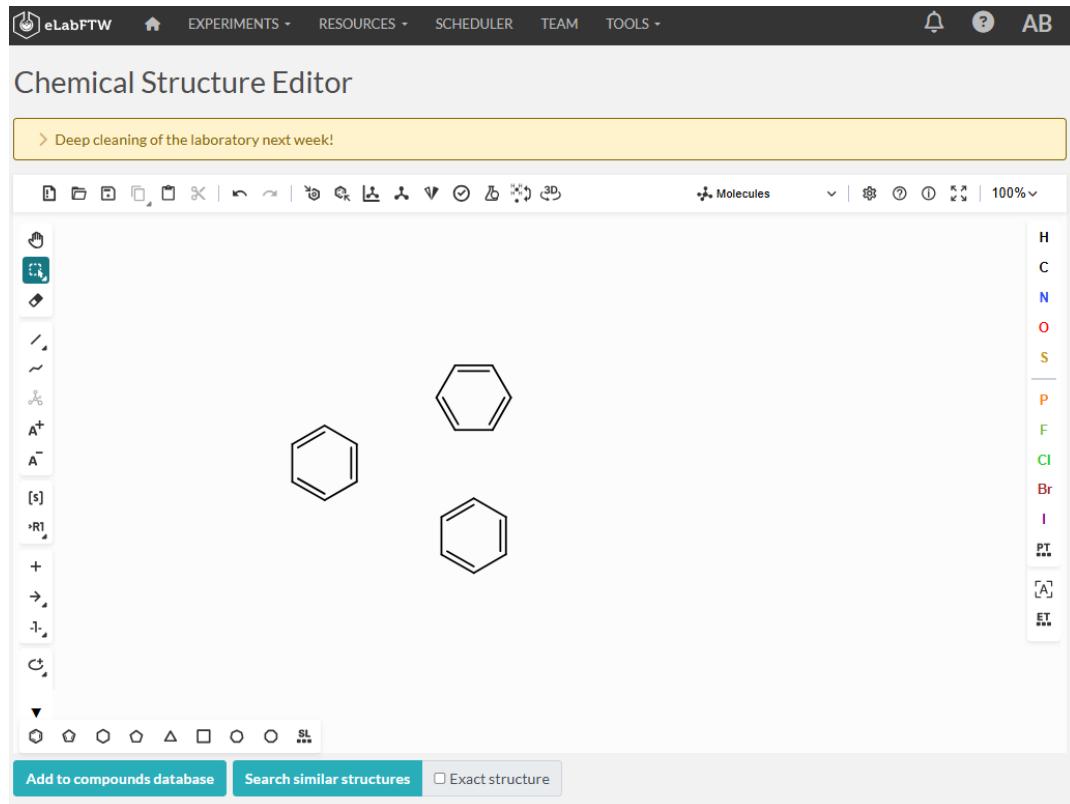
The Tools section includes a number of powerful and practical features. Please note that the Compounds and Inventory features work instance-wide. This means that entries in the Compounds database and entries in Inventory are visible and can be used by all users, regardless of their team. If you do not want other users, especially those from other teams, to be able to see your entries in these features, you should not use these features until further notice.

1) Compounds

Compounds is a chemical database that operates at the instance level and can be populated with chemicals by users. You can import chemicals from PubChem or add them manually. Manual post-processing of imported chemicals is also possible. Adding chemicals via the Chemical Structure Editor is another option. The chemicals stored here can in turn be used as references in the experiment and resource entries, and separate sections have been added to the entries for this purpose. Please note that SysAdmin does not perform any qualitative curation of the entries and therefore cannot accept any responsibility for the correctness of the information on individual chemicals in the database. Further information can also be found in the official [eLabFTW documentation](#).

2) Chemical Structure Editor

The Chemical Structure Editor (Figure 22) allows you to draw chemical structures yourself, save them, and attach them to your entries. This editor is based on Ketcher's Molecule Mode, and a detailed description of all functions can be found on [GitHub](#). In addition, you can also add the chemical compound to the local compounds database and even search for similar molecular structures, which is performed in the background by a “fingerprint” service.

**Figure 22: Chemical Structure Editor**

3) DNA OpenCloning

[OpenCloning](#) is an open-source DNA cloning software that has been integrated into eLabFTW to provide a planning and documentation tool for the cloning process. This section provides links to the official documentation of the [OpenCloning project](#) as well as the [adapted documentation](#) of the integration into eLabFTW (Figure 23). Finally, it should be mentioned here that the documentation in eLabFTW results in the creation of a new resource entry.

Figure 23: DNA OpenCloning

4) Inventory & Containers

Inventory and containers are features in eLabFTW that allow you to assign primary resources (but also experiments) to specific locations and also specify in what form (e.g., ml, kg, or au) and how often the objects occur at these locations. Inventory takes on the function of defining the (physical) locations and can be accessed via the Tools menu (Figure 24). It thus serves as a central collection point for all storage locations created in eLabFTW. “Containers,” on the other hand, are created for each resource or experiment and are therefore linked to the properties of the individual entry (Figure 25). The previously created “Inventory Locations” are also selected via the containers, thereby determining where the corresponding object can be found.

1. To obtain a list of all stored containers as a .csv file, simply click on the Export button.
2. The “root element” always appears at the beginning and should represent the highest level of assignment, such as a building or an entire complex, but a city would also be possible. This element cannot yet contain any containers; only the next level of “children” can do this.
3. On the “children” level, you can define further subordinate locations. Use the magnifying glass to search for all objects (containers) that are assigned to this location. It is also possible to delete elements, but only if no containers are assigned to them.

The screenshot shows the eLabFTW inventory interface. At the top, there is a navigation bar with links for EXPERIMENTS, RESOURCES, SCHEDULER, TEAM, and TOOLS. The TOOLS menu is open, showing options like 'Inventory', 'Containers', 'Scheduling', 'Team', and 'Help'. A red box labeled '1' highlights the 'Export' button in the top right corner of the main content area. Below it, a yellow banner displays a message: 'Deep cleaning of the laboratory next week!'. A search bar contains the text 'Sodium' with a 'Search' button. A red box labeled '2' highlights the 'Add root element' button, which has a plus sign icon and the text 'Add root element'. The main content area is titled 'Inventory' and shows a tree view of inventory locations. The first node is 'Campus Alte Technik' under 'Inventory location', with a red box labeled '3' highlighting its edit controls (a plus sign, a magnifying glass, and a minus sign). Below it are two more nodes: 'Rechbauerstrasse 12' and 'Campus Inffeld', each with its own set of edit controls. At the bottom of the page, there is a footer with the text 'Stand: 26.11.2025' and 'Seite 25 von 27'.

Figure 24: Inventory

4. If you are directly in a single experiment or resource, you can create new containers. Here you specify the capacity of a container and the unit. The “.” represents any unit. In addition, you specify how many containers are to be created.
5. Finally, you must assign the containers to a location. You can do this by clicking the “Store in ...” button.

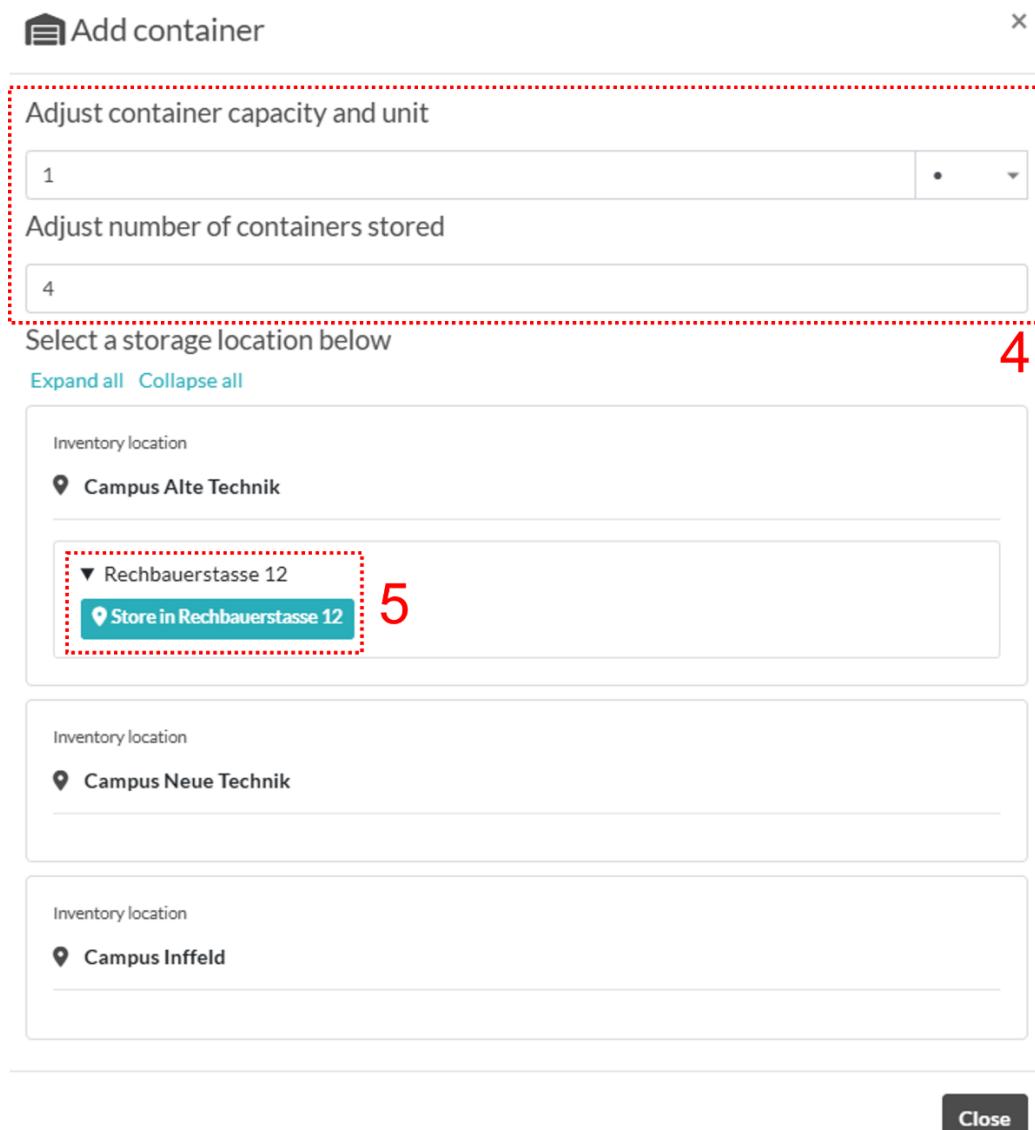


Figure 25: Containers

11) Hard Facts

Operating System: Linux

eLabFTW Version: 5.3.9

Docker image version: 5.7.1

PHP Version: 8.4.14

MySQL Version: 8.0.31

Maximum file size for uploaded files: 100M

Timezone: Europe/Paris

This document is based on the following document: Bardel, A. (2025). TU Graz eLabFTW User Guide.

Graz University of Technology. <https://doi.org/10.3217/x7xrj-15822>

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