



by Deltablot



**Chapter 00** 

# THE SOFTWARE: eLabFTW

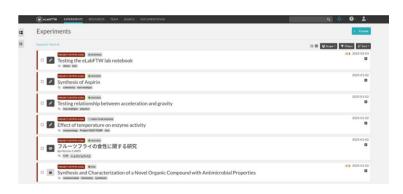


### The software: eLabFTW

**eLabFTW** is an electronic laboratory notebook for research groups

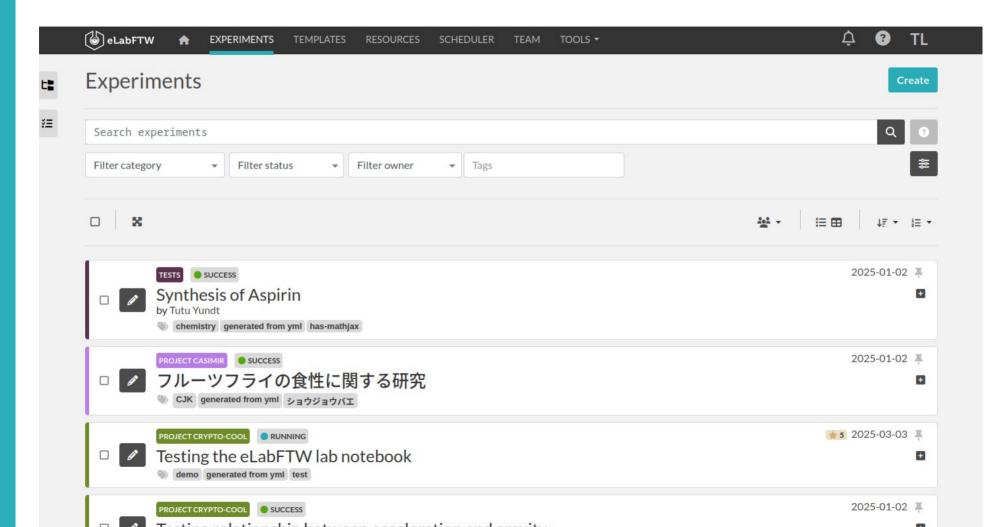


Modernity





#### The software: eLabFTW





#### The software: eLabFTW

... allows you to:

- Store digital results in a digital notebook
- Share procedures and protocols through templates
- Collaborate on scientific results
- Improve probity, traceability and integrity of results
- Use tablets or phone to access it
- Step into the XXI<sup>st</sup> century







#### Features of eLabFTW

- Freedom: published under an OSI approved license (AGPL3.0)
- **Utility**: saves time
- Popular: greatly appreciated by users
- Flexibility: adaptable to all kinds of research
- Security: code audits, bug bounty program, good practices
- Accessibility: follows WCAG 2.1 specifications
- Internationalisation : ~21 languages including Japanese ;)
- Community: large user base from various domains

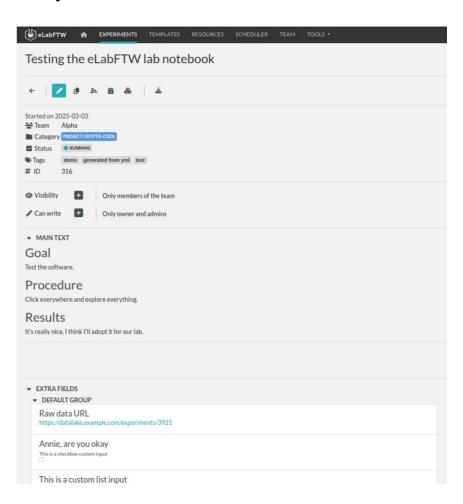


### General principles: we have experiments and resources

# Experiments – store your lab results:

- Attached files
- Custom fields
- Rich text editor
- Categories
- Tags
- Status
- Advanced search
- Advanced permissions



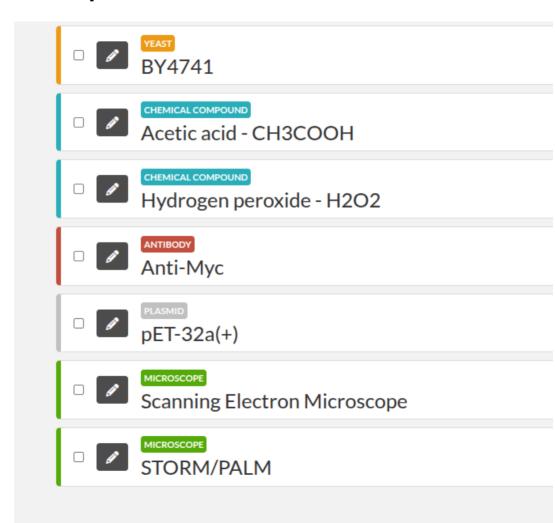




## General principles: we have experiments and resources

# Resources – store your materials and equipments

- Similar to experiments
- Highly customizable
- Booking system
- Inventory
- ...





## It's also a booking system

- Manage booking of resources:
  - Microscopes
  - Rooms
  - Machines, etc...
- Configure precisely:
  - Who is allowed to book a time slot
  - For how long
  - How many times in the day, etc...

elabftw 🏫 EXPERIMENTS TEMPLATES RESOURCES

SCHEDULER TEAM

TOOLS ▼



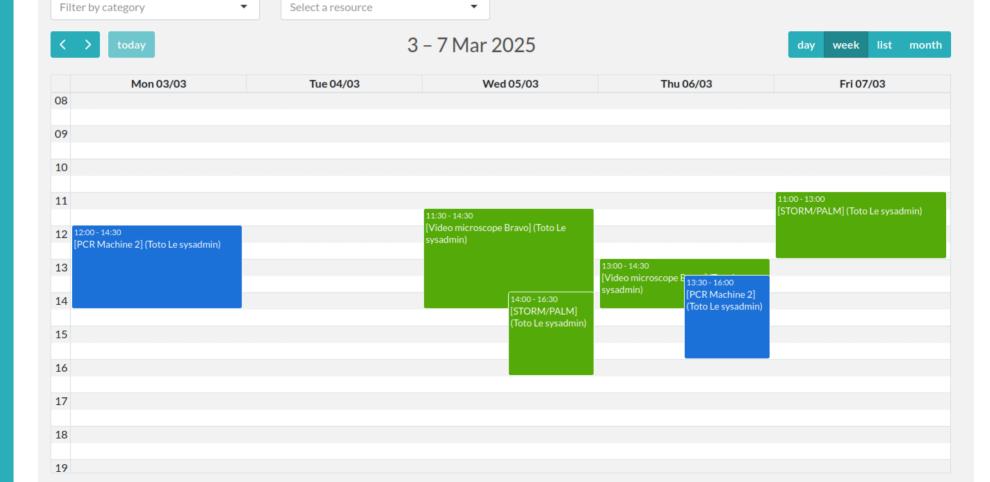


#### Scheduler

Select a resource below in order to book it.

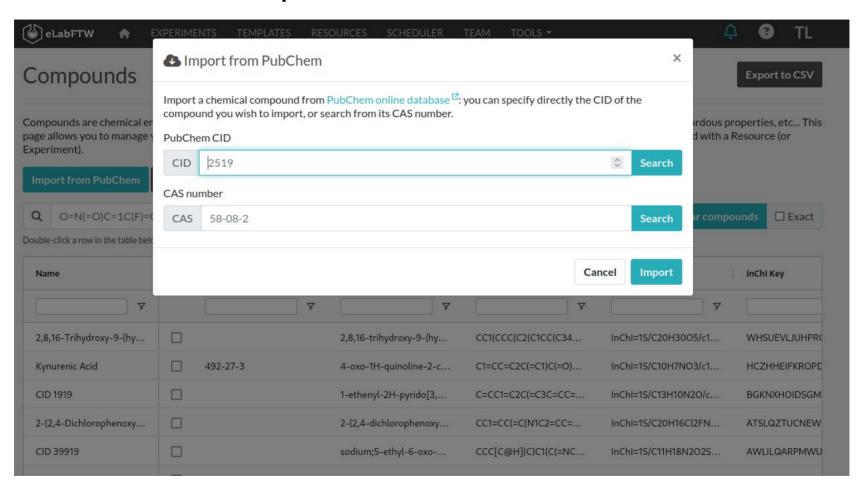








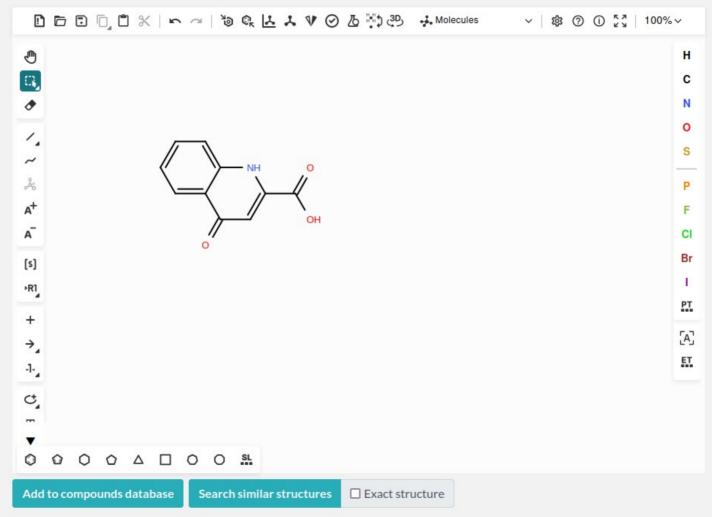
#### A chemical compounds database





	Ø Edit compound	▼ Safety information	
	Search associated resources	Hazardous to health  Corrosive  Explosive  Flammable  Gas under pressure  Hazardous to environment	
	Name  Eynurenic Acid		
	IUPAC Name		
	4-oxo-1H-quinoline-2-carboxylic acid		
	CAS number 492-27-3		
	EC number		
	200-362-1	Serious health hazard	
	Molecular formula  C10H7NO3	Oxidising	
	Molecular weight	•	
	. 189.17 SMILES	Toxic	
	C1=CC=C2C(=C1)C(=O)C=C(N2)C(=O)O	Radioactive  Controlled substance	
	InChI		
	InChI=1S/C10H7NO3/c12-9-5-8(10(13)14)11-7-4-2-1-3-6(7	<ul> <li>♣ Antibiotic precursor</li> <li>★ Explosive precursor</li> </ul>	
	## HCZHHEIFKROPDY-UHFFFAOYSA-N	O Drug precursor	
	- Cafaty information	Carcinogenic, mutagenic and reprotoxic (CMR)	
	▼ Safety information	Nanomaterial	

#### **Chemical Structure Editor**

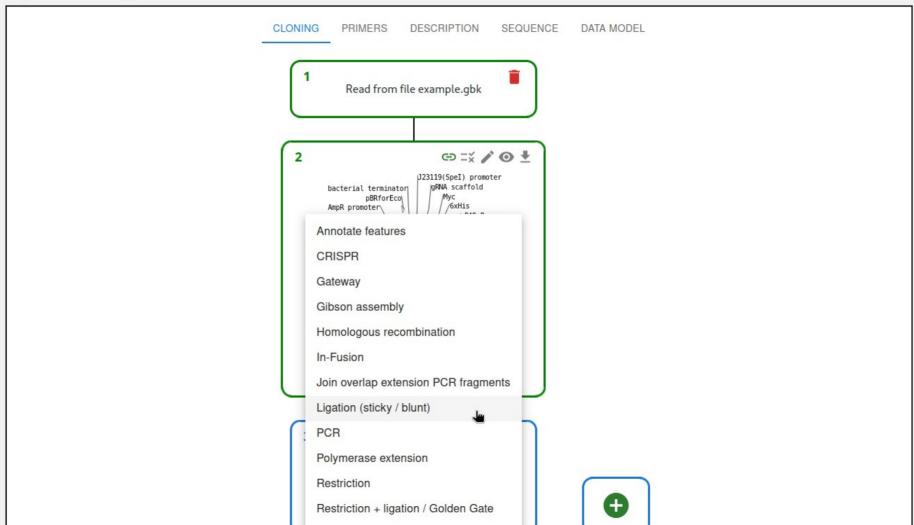






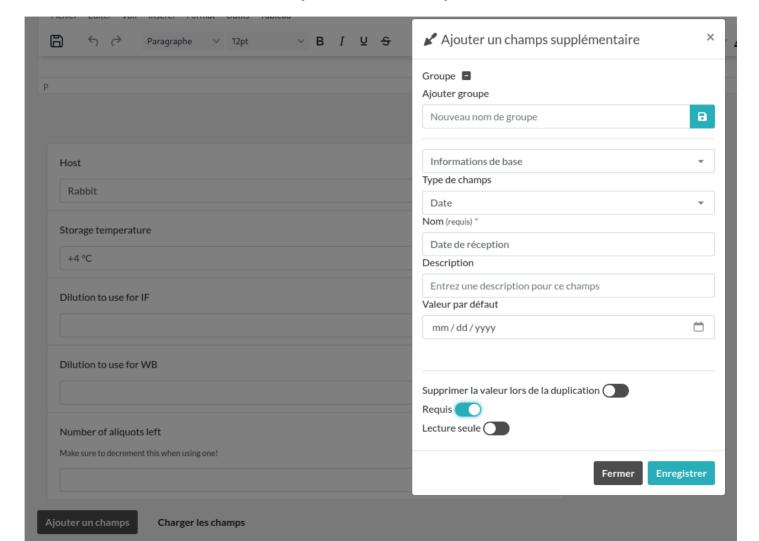


#### **OpenCloning**





#### Custom fields can be added to templates and experiments





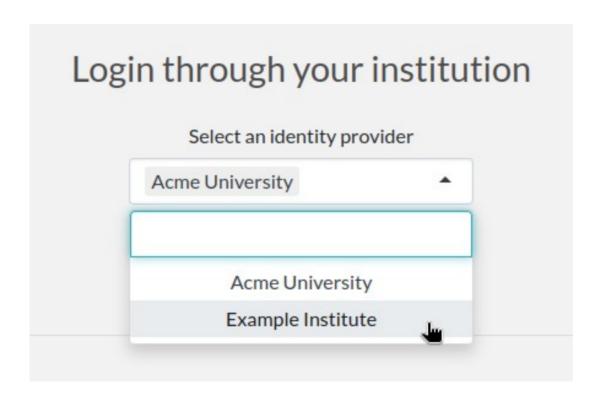
# Integrity, probity, timestamping



- eIDAS qualified timestamping (910/EU/2014 RFC 3161)
- Blockchain timestamping (Consortium Bloxberg)
- Immutable audit logs
- Immutable files with integrity cryptographic sum
- Cryptographic signatures (ed25519 elliptic curves)
- Soft delete mechanism to prevent destructive actions



#### Centralized authentication



- Use your institutional authentication service
- Support for federated services
- SAML or LDAP protocols



# Accessibility



- Compliant with WCAG2.1 guidelines
- Level AA et AAA when possible
- Included in Continuous Integration pipeline

Download our accessibility report:

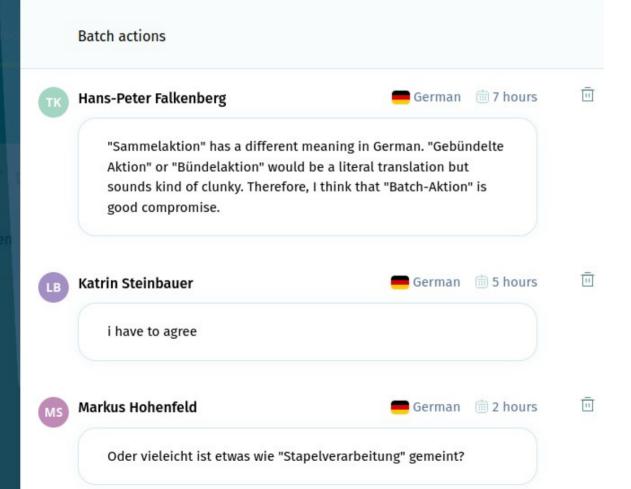
https://www.deltablot.com/files/deltablot-accessibility-report-WCAG.pdf





#### Comments

#### Internationalization



Translated into 21 languages by the user community (160+ contributors)

Each user is free to display the interface in the language of their choice



## Users in Europe

eLabFTW ELN is massively used in Europe by numerous Universities and companies



France: CNRS, IRD, INRAE, SOLEIL, ENS, various Universities and research centers

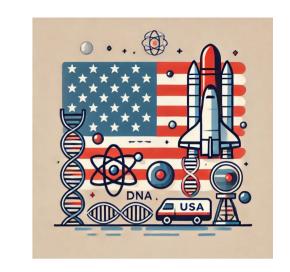
Germany: even more in use than France...

Spain, Portugal, Belgium, Italy, United Kingdom, Finland, Sweden, the list doesn't stop!



#### Users in United States of America

- Brandeis University (Massachussets)
- Montana State University (Montana)
- University of New England (Maine)
- NHLBI National Heart, Lung, and Blood Institute (Maryland)
- + various labs and private companies





# **Chapter 02 SOFTWARE SECURITY**





# Quality and security





#### **Quality and security aspects**

- Code audits by external security companies
- Bug bounty program for security researchers
- Responsible disclosure through CVE publication
- Advanced configuration options: centralized authentication, password policy, multi factor, protection against brute-force attacks, etc...
- Good practices of project management (OpenSSF referential)



# eLabFTW: quality and security

# Host: demo.elabftw.net Scan ID #: 20518336 (unlisted) Start Time: July 28, 2021 2:59 PM Duration: 6 seconds Score: 115/100 Tests Passed: 11/11

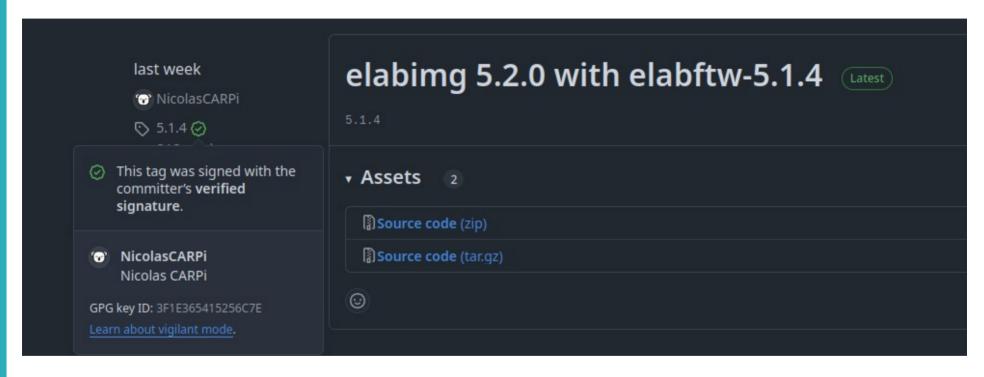
Scan result from observatory.mozilla.org

#### More security aspects

- Perfect score on Mozilla's Obervatory
- Services hardening
- Services containerization
- Automated vulnerabilities scanning



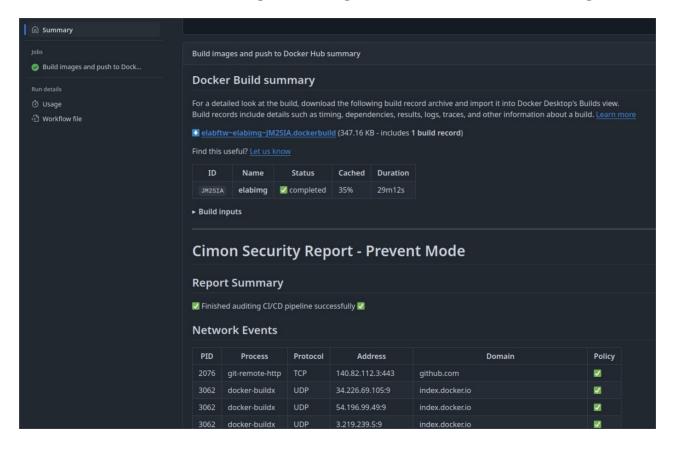
# eLabFTW: quality and security



Tagged releases are signed with a GPG key and have a public build log



# eLabFTW: quality and security



Auditable build logs with kernel level protection against supply chain attacks



# Chapter 03

# **OPEN SCIENCE COMMUNITY**



# eLabFTW: a major actor in open science and FAIR data

#### **Founding member of The ELN Consortium**

- 15+ members including other ELN editors
- Created a standardized exchange file format (.eln)
- Based on RO-Crate and JSON-LD
- Recognized as an official media type by IANA
- Increases interoperability of data (FAIR)





#### User reviews



polySpectra

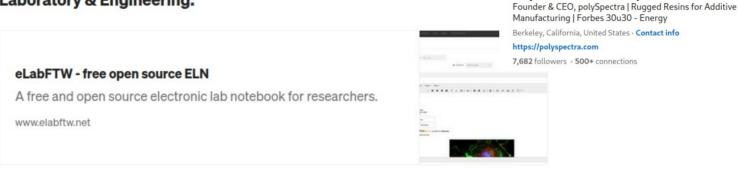
Caltech



Raymond Weitekamp @ .3rd

polySpectra's **Cyclic Olefin Resin (COR)** enables manufacturers to **3D print durable end-use products** in numerous advanced application verticals.

#### Laboratory & Engineering:

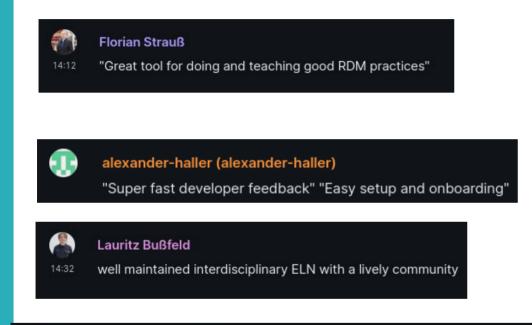


I am in love with eLabFTW. As a synthetic chemist, this is the electronic lab notebook I have been waiting for (for the last decade). eLabFTW is completely free, yet it is hands-down better than LabGuru, LabArchive and CambridgeSoft's E-Notebook. Better features, better customer support, better business model — eLabForTheWin. They have done an amazing job of improving the ease of installation and maintenance over the past few years. If anyone at Institut Curie is reading this right now, please give Nico a raise;)

Source: https://medium.com/phd-to-ceo/an-open-source-stack-for-physical-science-startups-c83266852efc



#### User reviews







adienne\_karsten | ULB MS

In reply to NicolasCARPi

Mahadi Xion

eLabFTW is built on top of a stable OpenAPI design that gives me confidence that my API automation scripts are future proof.

"Intuitive to use, great UI, great community, open source and generically usable!" 💋



#### User reviews

The most adapted ELN software for academic research groups.

A true alternative to paper notebooks, that is simple and intuitive to use.

Garrett Curley – École Polytechnique – Laboratoire Physique des Plasmas

As an open-source tool, eLabFTW allows full customization without expensive licenses. It's great for labs that need flexibility and control over their data

Hüseyin Uzun – RDM Universität Frankfürt

A user-friendly and flexible open source tool with great support and a helpful community

Nikki Parks – Universität Aachen

Easy and simple to setup and use.

Rohit Karthikeyan



# Chapter 04

# THE DELTABLOT COMPANY



- Founded in 2019
- Located in Paris, France
- Operating on 4 continents
- Dedicated to helping research teams





Nicolas Carpi President



Sydney Koke Customer Success Manager



Moustapha Camara Full Stack Developer



# Our partners







Paris, France

**Easter Eggs**GNU/Linux
specialists

Paris, France

**Universign** eIDAS qualified timestamping

Marseille, France

Keeex
Document integrity,
traceability, and
probity





# Our team of experts



Marcel Bolten: Fullstack developer



Hüseyin Uzun: Video editor, german language trainer



• Simon Bekemeier: German language trainer



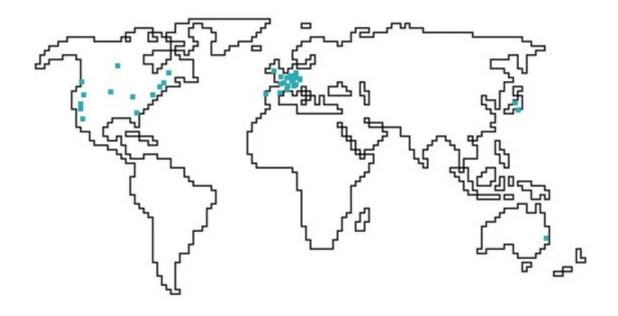
Manon Stripes: UI/UX design



**Anders Märak Leffler**: Cybersecurity specialist



# Our customers





# Open Source is important to us

- We maintain open source projects
- We contribute to open source projects
- We donate to open source projects
- We are member of APRIL association for the promotion of free and libre software

Learn more: https://www.deltablot.com/opensource/



# Chapter 05 CHOOSE YOUR PLAN



# Hosted by us in the cloud or by you on your network

1 We take care of everything (SaaS)

#### **PRO SUPPORT**

We help you deploy eLabFTW on your network and provide support (On-Premise)



# 1. PRO Hosting

- Hosted close to you:
  - Europe → Paris, France, optionally in the SecNumCloud environment
  - North America → Toronto, New York, or San Francisco
  - Japan, Australia → Tokyo
- Dedicated eLabFTW instance
- Custom domain name
- eIDAS qualified timestamping tokens included
- Fully managed backups and updates
- Ransomware protection
- Infinite updates
- Includes PRO Support





#### Hosted in Japan (Tokyo)

- ISO 27001
- SOC 2 Type 2
- SOC 1 Type 2
- PCI DSS



# We take care of everything PRO Hosting

Yearly cost is 4,985 € or ~ 799,500 円

Come discuss with us for specific offers tailored to your needs!









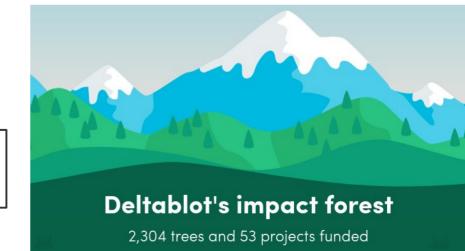




# Support for self-hosting PRO Support

- We help you implement eLabFTW within your IT system
- User training (webinars) in French, English or German
- Access to sandbox instance
- 20% discount on custom development requests
- 1000 eIDAS qualified timestamping token

1 789 € / year 286,940 円 / year





## Contact us

# contact@deltablot.email

or better: come discuss with us now that we're here;)