eLabFTW

**The Free and Open Source
Electronic Lab Notebook**

www.elabftw.net

Summary

- Why use an electronic lab notebook?

- Why use an open source solution?

- Why use eLabFTW?
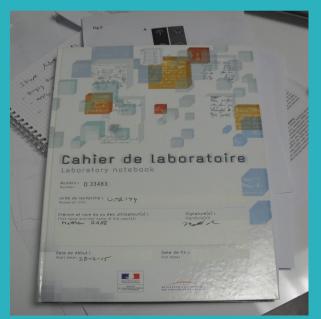
- Why use Deltablot hosting?

Why use an ELN?

Problem:

Need to store metadata of experiments (what, when, where, who, why, how)

Why use an ELN?

Problem:

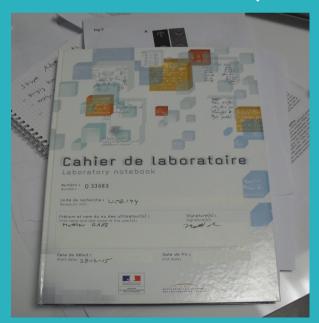Need to store metadata of experiments (what, when, where, who, why, how)
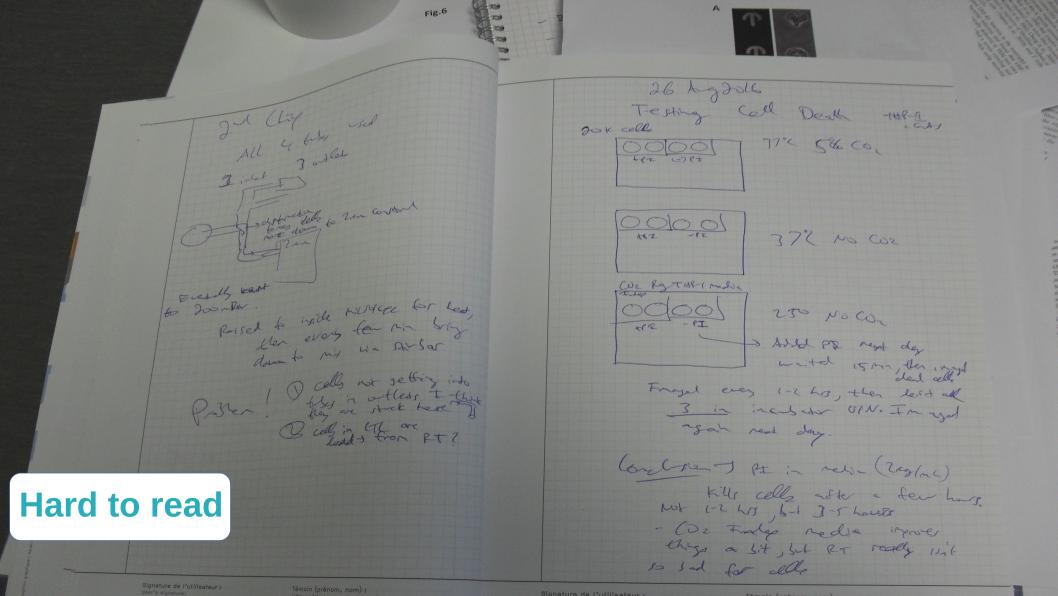
Solution:

Why use an ELN?

Problem:

Need to store metadata of experiments (what, when, where, who, why, how)

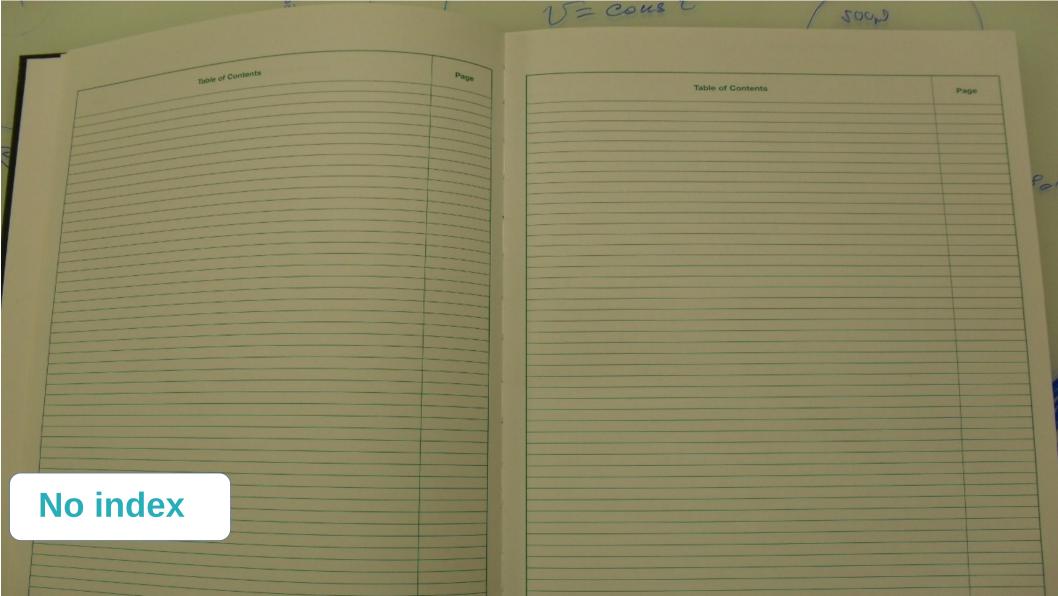Solution:

Limitations:
- Can be lost or burned
- No backups
- Often empty
- Not readable by others easily
- Can't search for something
- Can't input digital data

Left page:

2nd Chip

ALL 4 tubes used

3 inlet   3 outlet

[sketch diagram]
→ obstruction
forces cells
note down
to 2nd control
area

Eventually want
to 700mBar.

Raised to inside NEEDLE for heat,
then every few min bring
down to mix via AirBar

Problem! ① cells not getting into
tubes in outlets I think
they are stuck here
② cells in LHS are
dead → from RT?

Right page:

26 Aug 2016

Testing Cell Death +HP-1
cells

20K cells

[3 chamber diagrams on left, labels +P2 / -P2, +P2 / -P2, +P2 / -P1]

37°C 5% CO_2

37°C NO CO_2

CO_2 Reg +HP-1 media
Fridge

25° NO CO_2

→ Add P2 next day
waited 15 min, then imaged
dead cells

Imaged every 1-2 hrs, then left all
3 in incubator O/N. Imaged
again next day.

Conclusion → P1 in media (2µg/mL)
kills cells after a few hours.
Not 1-2 hrs, but 3-5 hours
- CO_2 Fridge media improves
things a bit, but RT really bad
so bad for cells

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Now you want to use an ELN

Problem:

Which one?

"Should we use the free solutions out there?"
"But if it's free, it means we are the product, right?"
"Those privacy policies mention too many times the word "marketing" to my taste"

Real world example from a commercial ELN:

tracking email invitations you send; and otherwise supporting your use of the Site. We may use your personal data for target advertising toward you based on things such as region, gender, position, interests, goals, habits, etc. and in order to meet legal obligations.

Now you want to use an ELN

Problem:

Which one?

Problem with long term sustainability of proprietary solutions.

→ Only an open source solution is viable in the (very) long term!

Now you want to use a free and open source ELN

Problem:

Which one?

Well, eLabFTW of course!
It's the most popular, versatile, modern, and secure ELN out there!* ;)

*source: me

eLabFTW

- Developed since 2012
- Free as in beer
- Free as in speech
- Vibrant users community
- Has all features you might expect and then some
- Modern codebase and interface
- Secure
- Popular all over the world
- Loved by users
- Recommended by CNRS
- Made in France
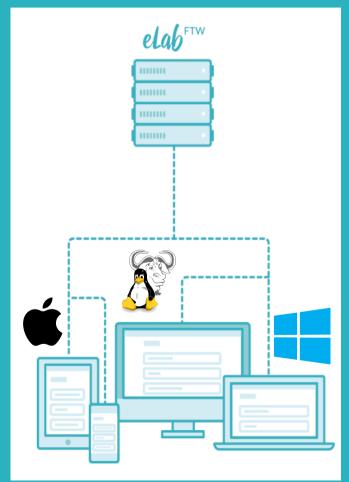
eLabFTW: key features

Web application: works across all operating systems

No client to install

Responsive design: works with all screen sizes (no apps required)

eLabFTW: key features

Trusted timestamping
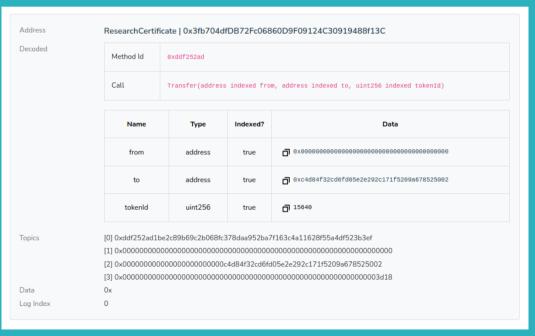
RFC 3161 timestamping for experimental data.

Compatible with European Regulation eIDAS 910/eu/2014 and qualified timestamping authorities.

eLabFTW: key features

bloXberg

Blockchain timestamping

Leverage the blockchain technology to timestamp and certify research data.

eLabFTW: key features
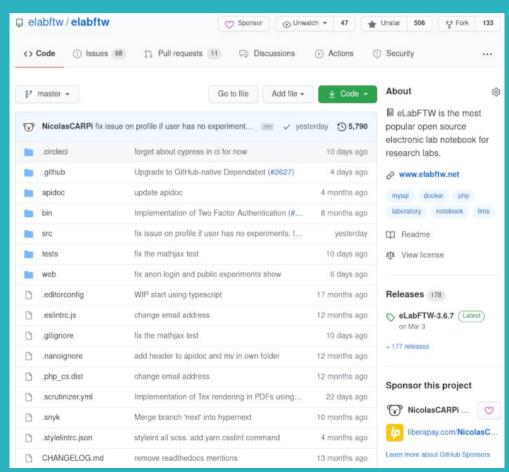
Completely Open Source

Access to the source code is immediate

Users contributions are welcome

Great community of users: ongoing discussions and contributions for the future of lab notebooks and eLabFTW

eLabFTW: key features

- Trusted timestamping (RFC 3161)
- Blockchain timestamping
- API access
- SAML/LDAP authentication
- Templates for experiments
- Database for products/protocols
- Export in ZIP, PDF, CSV, JSON
- QR codes
- Molecule editor
- Todolist
- Tex rendering
- Very customizable
- Translated in 17 languages

eLabFTW: key features

- Strictly no data leaking to third parties

- Confidentiality is guaranteed

- You stay in control of your data at all times

- Highly customizable

eLabFTW: quality software
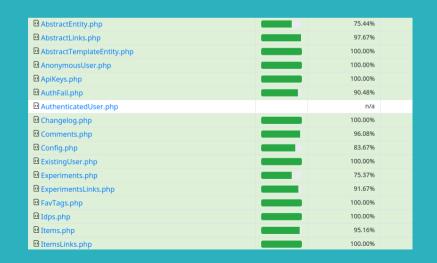
- Test suite (unit, end-to-end, static analysis)
- Respects code standards
- Best practices followed
- Modern tooling used

PASSED

Scrutinizer 9.14 | openssf best practices passing | chat on gitter | license AGPL | release v4.5.11 | tech stack
JOSS 10.21105/joss.00146
carbon offset 33.04 tonnes | trees 2.1k | trees plant more trees

▼ ✔ Run unit tests

```
59    - Entity2Cest: Find a non existing item✔ Entity2Cest: Find a non existing item(0.83s)
60    -----------------------------------------------------------------
61
62    Unit Tests (388) -----------------------------------------------------------------
63    - AuthTest: Try auth✔ AuthTest: Try auth(0.05s)
64    - CsrfTest: Get token✔ CsrfTest: Get token(0.09s)
65    - CsrfTest: Validate get✔ CsrfTest: Validate get(0.01s)
66    - CsrfTest: Validate ajax fail✔ CsrfTest: Validate ajax fail(0.01s)
67    - CsrfTest: Validate form fail✔ CsrfTest: Validate form fail(0.01s)
68    - CsrfTest: Validate form✔ CsrfTest: Validate form(0.01s)
69    - ExtensionsTest: Get icon from extension✔ ExtensionsTest: Get icon from extension(0.01s)
70    - MetadataTest: No metadata✔ MetadataTest: No metadata(0.01s)
71    - MetadataTest: With extra fields✔ MetadataTest: With extra fields(0.00s)
72    - MetadataTest: Get display main text✔ MetadataTest: Get display main text(0.00s)
73    - MetadataTest: Blank value on duplicate✔ MetadataTest: Blank value on duplicate(0.00s)
74    - SamlTest: Testget settings✔ SamlTest: Testget settings(0.02s)
75    - SqlTest: Exec file✔ SqlTest: Exec file(0.01s)
76    - SqlTest: Exec non existing file✔ SqlTest: Exec non existing file(0.00s)
77    - SqlTest: Broken filesystem✔ SqlTest: Broken filesystem(0.01s)
78    - ToolsTest: Format bytes✔ ToolsTest: Format bytes(0.00s)
```

File		Coverage
AbstractEntity.php		75.44%
AbstractLinks.php		97.67%
AbstractTemplateEntity.php		100.00%
AnonymousUser.php		100.00%
ApiKeys.php		100.00%
AuthFail.php		90.48%
AuthenticatedUser.php		n/a
Changelog.php		100.00%
Comments.php		96.08%
Config.php		83.67%
ExistingUser.php		100.00%
Experiments.php		75.37%
ExperimentsLinks.php		91.67%
FavTags.php		100.00%
Idps.php		100.00%
Items.php		95.16%
ItemsLinks.php		100.00%

eLabFTW: secure software

- Tight and secure configuration at different levels

- Vulnerability scans

- Signed releases

- Perfect score on Mozilla's Observatory

eLabFTW: secure software

SSL Report: demo.elabftw.net (2001:bc8:31d5:100:0:0:0:1)
Assessed on: Tue, 21 May 2019 22:46:39 UTC | HIDDEN | Clear cache

Scan Another »

Summary

Overall Rating

A

Certificate
Protocol Support
Key Exchange
Cipher Strength

0   20   40   60   80   100

Source: Mozilla's Observatory

Scan Summary

A+

Host:	demo.elabftw.net
Scan ID #:	19066810 (unlisted)
Start Time:	May 8, 2021 9:19 PM
Duration:	6 seconds
Score:	115/100
Tests Passed:	11/11

Security Report Summary

A+

Site:	https://demo.elabftw.net/login.php
IP Address:	2001:bc8:31d5:100::1
Report Time:	21 May 2019 22:43:47 UTC
Headers:	✔ Strict-Transport-Security ✔ X-Frame-Options ✔ X-XSS-Protection ✔ X-Content-Type-Options ✔ Content-Security-Policy ✔ Referrer-Policy ✔ Feature-Policy

eLabFTW: secure software
… not like others…

Scan Summary

F — Host: my.labguru.com | Scan ID #: 10882470 | Start Time: May 22, 2019 12:04 PM | Duration: 1 seconds | Score: 20/100 | Tests Passed: 6/11

Scan Summary

D — Host: www.docollab.com | Scan ID #: 10882496 | Start Time: May 22, 2019 12:11 PM | Duration: 2 seconds | Score: 35/100 | Tests Passed: 6/11

Scan Summary

F — Host: www.eclabnote.com | Scan ID #: 10882493 | Start Time: May 22, 2019 12:11 PM | Duration: 2 seconds | Score: 0/100 | Tests Passed: 5/11

Scan Summary

B — Host: my.scinote.net | Scan ID #: 10882483 | Start Time: May 22, 2019 12:08 PM | Duration: 6 seconds | Score: 75/100 | Tests Passed: 10/11

Scan Summary

C⁻ — Host: eln.chemotion.net | Scan ID #: 10882556 | Start Time: May 22, 2019 12:19 PM | Duration: 3 seconds | Score: 45/100 | Tests Passed: 9/11

Scan Summary

F — Host: exemplareln.com | Scan ID #: 10882503 | Start Time: May 22, 2019 12:12 PM | Duration: 3 seconds | Score: 15/100 | Tests Passed: 5/11

Scan Summary

F — Host: labcollector.com | Scan ID #: 10882563 | Start Time: May 22, 2019 12:21 PM | Duration: 19 seconds | Score: 0/100 | Tests Passed: 3/11

Scan Summary

C⁻ — Host: openwetware.org | Scan ID #: 10882490 | Start Time: May 22, 2019 12:10 PM | Duration: 2 seconds | Score: 45/100 | Tests Passed: 8/11

Scan Summary

F — Host: osf.io | Scan ID #: 10882485 | Start Time: May 22, 2019 12:09 PM | Duration: 2 seconds | Score: 10/100 | Tests Passed: 7/11

Scan Summary

B⁺ — Host: www.labii.app | Scan ID #: 10882569 | Start Time: May 22, 2019 12:22 PM | Duration: 3 seconds | Score: 80/100 | Tests Passed: 10/11

Scan Summary

D — Host: www.benchling.com | Scan ID #: 10882521 | Start Time: May 22, 2019 12:16 PM | Duration: 2 seconds | Score: 35/100 | Tests Passed: 6/11

Scan Summary

C — Host: app.labstep.com | Scan ID #: 10882589 | Start Time: May 22, 2019 12:26 PM | Duration: 4 seconds | Score: 50/100 | Tests Passed: 10/11

Scan Summary

F — Host: www.scilligence.com | Scan ID #: 10882597 | Start Time: May 22, 2019 12:28 PM | Duration: 1 seconds | Score: 0/100 | Tests Passed: 5/11

Scan Summary

F — Host: www.labware.com | Scan ID #: 10882601 | Start Time: May 22, 2019 12:29 PM | Duration: 6 seconds | Score: 0/100 | Tests Passed: 3/11

Scan Summary

D⁻ — Host: pillar.science | Scan ID #: 10882612 | Start Time: May 22, 2019 12:30 PM | Duration: 1 seconds | Score: 25/100 | Tests Passed: 9/11

eLabFTW: supported software

Free support on GitHub
PRO support available from Deltablot
Hosting available from Deltablot

→ Best of both worlds: supported open source

https://www.deltablot.com

contact@deltablot.email

eLabFTW: get hosted!

Hosting a web service can be tricky if you don't have the right knowledge.

HSTS, SSH, TLS, CSP, Docker, Nginx, Backups, updates, protecting against threat actors, staying online...

Don't worry about all of that, and use Deltablot's hosting!

See Deltablot hosting solution

Get in touch:
contact@deltablot.email

eLabFTW: links

Main website: https://www.elabftw.net

Documentation: https://doc.elabftw.net

Live demo: https://demo.elabftw.net

Source code: https://github.com/elabftw/elabftw

Commercial website: https://www.deltablot.com/elabftw