The Free and Open Source Electronic Lab Notebook

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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?

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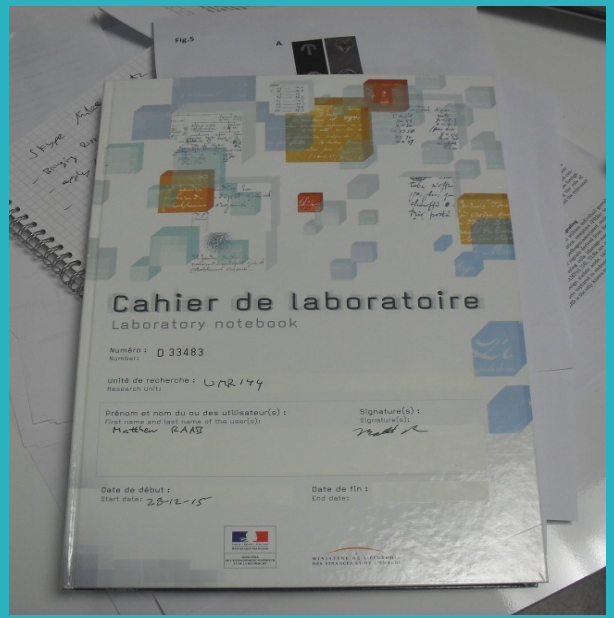
Solution:



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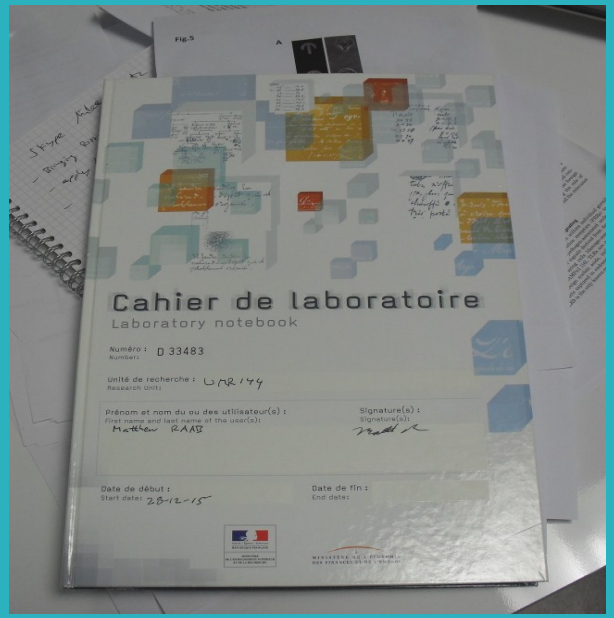


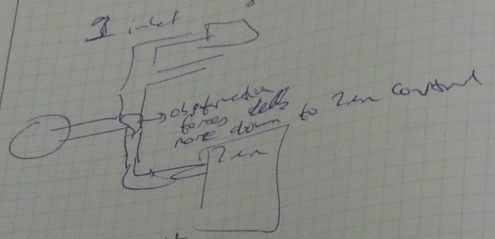
Limitations:

- Can be lost or burned
- No backups
- Often empty
- Not readable by others easily
- Can’t search for something

2nd Chip

All 4 tubes used

3 inlet 3 outlet



Eventually went to 200mBar.

Raised to inside microscope for heat, then every few min bring down to mix via stirbar

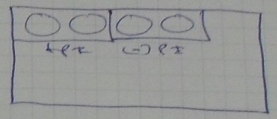
Problem! ① cells not getting into tubes in outlets I think they are stuck here

② cells in LTL are dead → from RT?

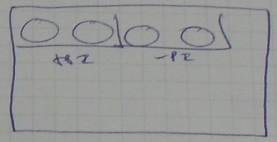
26 Aug 2016

Testing Cell Death THP-1 cells

20K cells

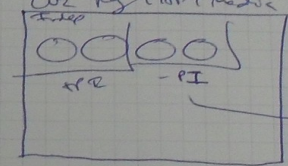


37°C 5% CO_2



37°C No CO_2

CO_2 Rg THP-1 media



25° No CO_2

→ Added PI 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 → PI in media (2ug/mL) kills cells after a few hours. Not 1-2 hrs, but 3-5 hours

- CO_2 Indep media improves things a bit, but RT really isn't 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”

Now you want to use an ELN

Problem:

Which one?

“But should I give all my research results to a foreign company on which I have no control?”
“What happens if that company gets bought by a Chinese consortium?”
“What happens to my data if that company closes”

Now you want to use a free and open source ELN

Problem:

Which one?

Well, eLabFTW of course! It’s the most popular one and the most flexible, modern and fast ELN out there!* ;)

*source: me

eLabFTW

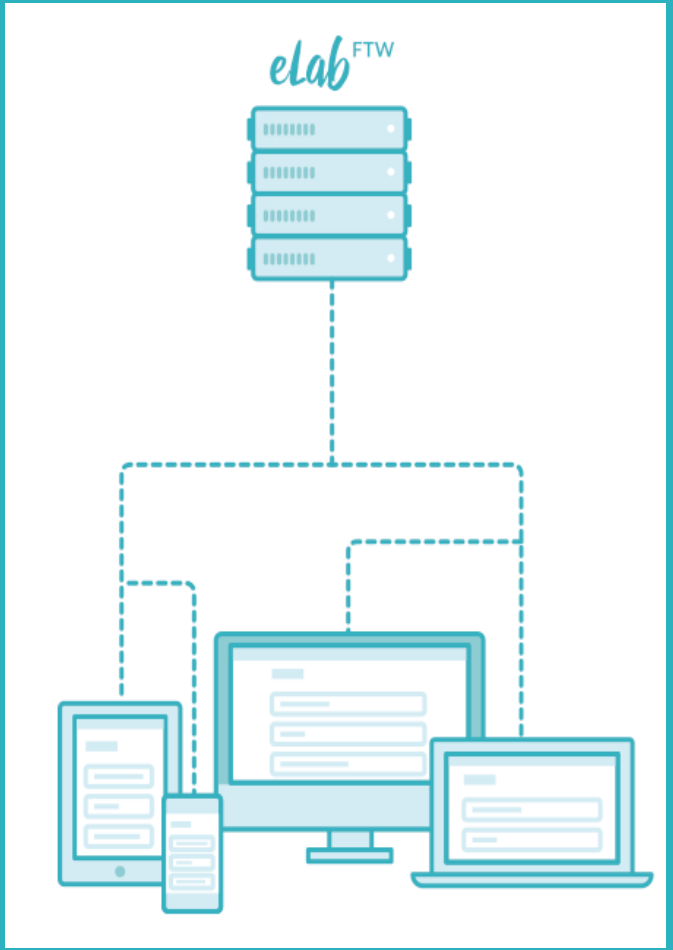
- Developed since 2012
- Free as in beer
- Free as in speech
- 420+ stars on GitHub
- Vibrant users community contributing to the software
- Modern
- Has great features
- Secure
- Popular all over the world

eLabFTW: key features

Web based

No client to install

Responsive design (works with all screen sizes)

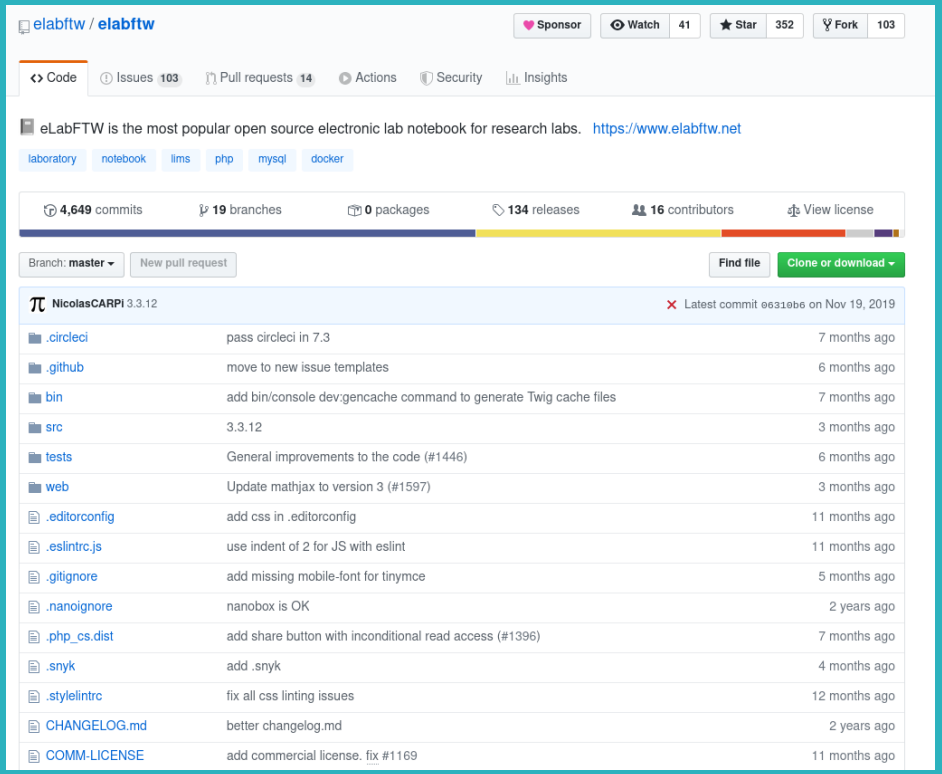


eLabFTW: key features

Open source

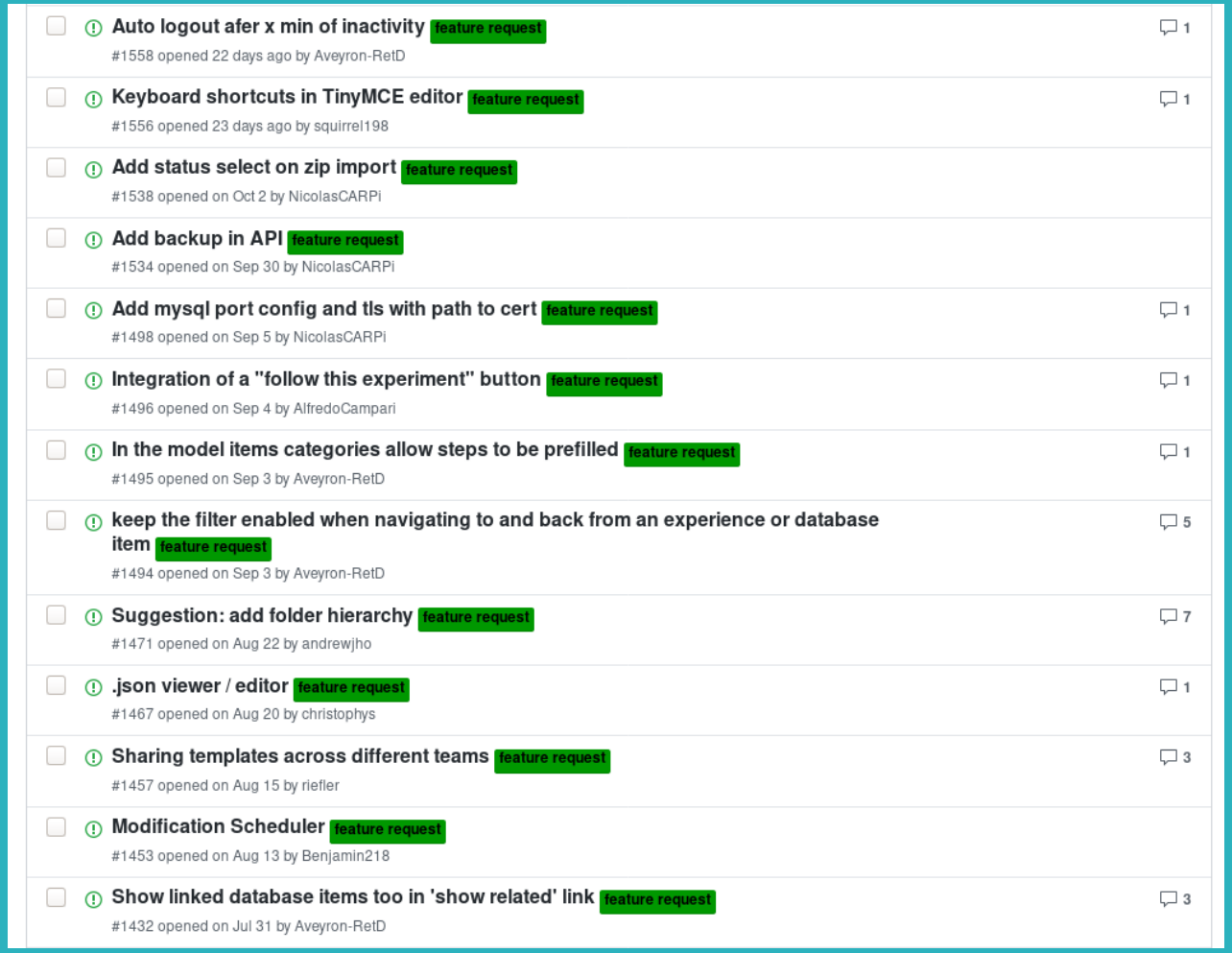
Access to the source code is immediate

Users contributions are welcome



A good read: [The closed source sustainability crisis]

eLabFTW: community driven development



- **Auto logout afer x min of inactivity** feature request — 1
  #1558 opened 22 days ago by Aveyron-RetD
- **Keyboard shortcuts in TinyMCE editor** feature request — 1
  #1556 opened 23 days ago by squirrel198
- **Add status select on zip import** feature request
  #1538 opened on Oct 2 by NicolasCARPi
- **Add backup in API** feature request
  #1534 opened on Sep 30 by NicolasCARPi
- **Add mysql port config and tls with path to cert** feature request — 1
  #1498 opened on Sep 5 by NicolasCARPi
- **Integration of a "follow this experiment" button** feature request — 1
  #1496 opened on Sep 4 by AlfredoCampari
- **In the model items categories allow steps to be prefilled** feature request — 1
  #1495 opened on Sep 3 by Aveyron-RetD
- **keep the filter enabled when navigating to and back from an experience or database item** feature request — 5
  #1494 opened on Sep 3 by Aveyron-RetD
- **Suggestion: add folder hierarchy** feature request — 7
  #1471 opened on Aug 22 by andrewjho
- **.json viewer / editor** feature request — 1
  #1467 opened on Aug 20 by christophys
- **Sharing templates across different teams** feature request — 3
  #1457 opened on Aug 15 by riefler
- **Modification Scheduler** feature request
  #1453 opened on Aug 13 by Benjamin218
- **Show linked database items too in 'show related' link** feature request — 3
  #1432 opened on Jul 31 by Aveyron-RetD

eLabFTW: key features

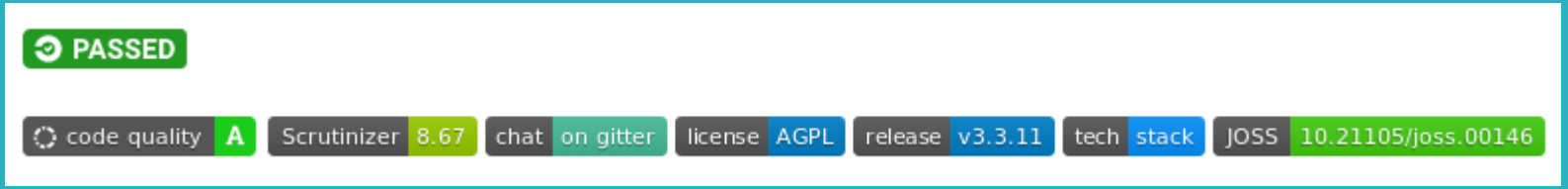
- Trusted timestamping (RFC 3161)
- API access
- SAML authentication
- Templates
- Database for products/protocols
- Export in ZIP, PDF, CSV, JSON
- Molecule editor
- Todolist
- Tex rendering
- Very customizable
- Translated in 17 languages

eLabFTW: key features
For research centers/universities

- Host it on your network
- Centralize your results on one server
  - No data gets lost if a laptop of a postdoc is stolen
  - Several teams can be hosted on the same instance

eLabFTW: quality software

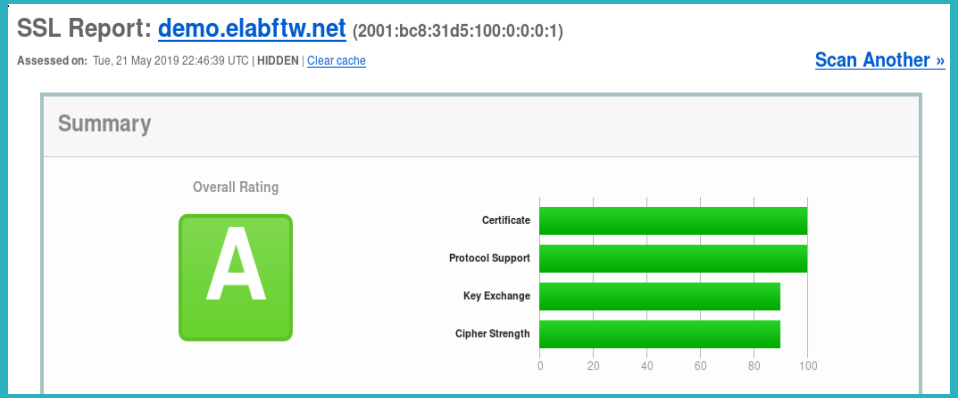
- Test suite (unit, acceptance, static analysis)
- Respects code standards
- Best practices followed
- Modern tooling used

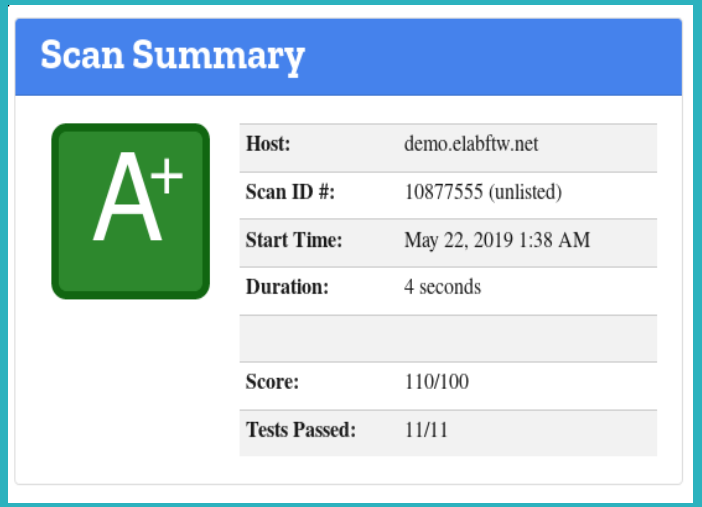


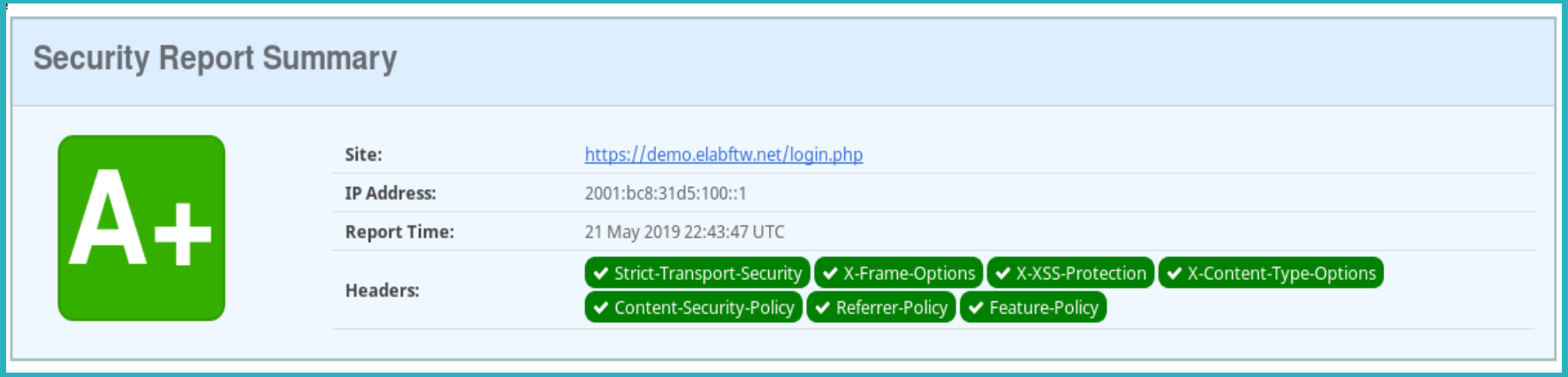
eLabFTW: secure software

- Tight and secure configuration at different levels
- Vulnerability scans
- Signed releases
- Perfect score on Mozilla’s Observatory

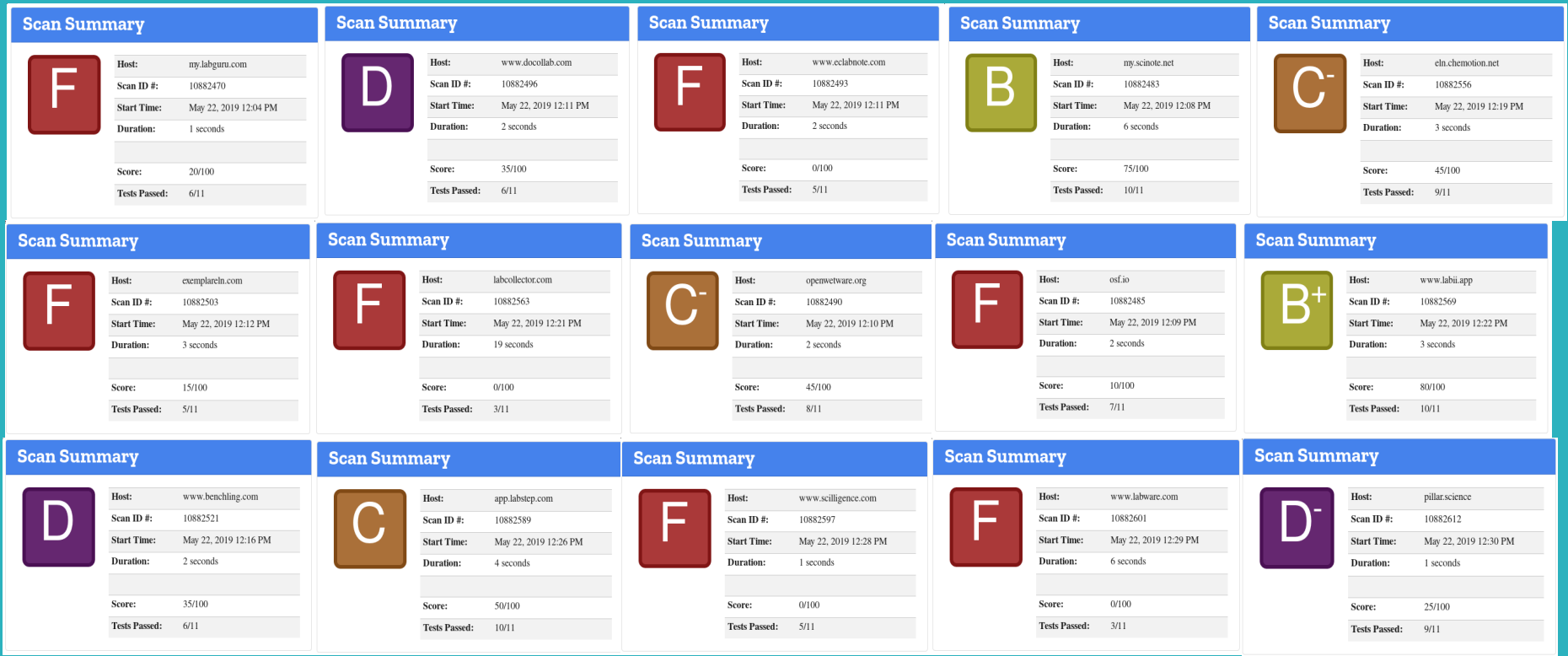
eLabFTW: secure software







eLabFTW: secure software
... not like others...



eLabFTW: supported software

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

https://www.deltablot.com

contact@deltablot.email

Live debug session