

Traction

Getting Traction for (your) Open Source Projects

Michael Boelen

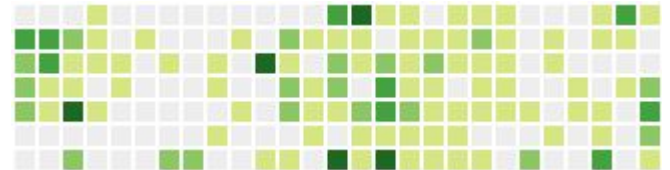
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T-DOSE 2016, 12 November (NLLGG track)

Why? (developers)

Promote your open source project

- Users
- Feedback
- Invisible benefits



Why? (non-developers)

Use your knowledge

- Contribute
- Improve software you use
- Enhance your resume

Michael Boelen

- **Open Source**
 - Lynis, Rootkit Hunter
- **Business**
 - Founder of [CISOfy](#)
- **Other**
 - Blogger at [Linux-Audit.com](#)
 - Board member and program committee NLUUG



Traction?

Something that is “going” and grows (quickly)

Example: my open source project, that continuously gains in popularity, and becomes well-known.

Traction Channels

- Trade shows
- Affiliate programs
- Offline advertising
- Search Engine Marketing
- Social advertisements
- Viral marketing
- Business development
- Public relations
- Search Engine Optimization
- Content management
- Demo's
- Community building
- Speaking engagements
- Reaching out to blogs
- Social sharing
- Email marketing

Is that really needed for FOSS?

Importance of Traction

Software is written **to be used**

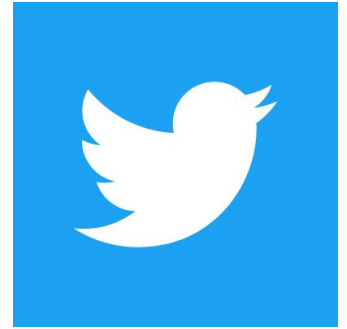
Translating to Open Source

Components

- Quality of software
- Promotion
- Community

Promotion

Experiment



Great tip:

by @mboelen at @TDOSE (@nllgg track)

Low-hanging fruit

Name

- Remember (or forget...)
- Length
- Goal

Name

Good

Rootkit Hunter
(rkhunter)

Bad

Lynis

Versioning

Semantic!

Major.Minor.Patch

Learn more: semver.org

Change Log

- History
- Trust
- Troubleshooting

Documentation

- README.md
- Get Started
- Other documentation

Project Description

GitHub SEO

lynis

Lynis - Security auditing and hardening tool, for UNIX-based systems.

Lynis is a security auditing for UNIX derivatives like Linux, macOS, BSD, and Solaris. It performs an **in-depth security scan** on the system itself, with the goal to detect issues and **provide tips for further system hardening**. It will also scan for general system information, vulnerable software packages, and possible configuration issues. Lynis is commonly used by people in the "blue team" to assess the security defenses of their systems.

We believe software should be **simple, updated on a regular basis, and open**. You should be able to trust, understand, and have the option to change the software. Many agree with us, as the software is being used by thousands every day to protect their systems.

Best Practices for CLI

--full-throttle-engine, -f
--help, -h, or help
--version, -V

Learn more: doctopt.org

```
$ ./lynis show help
Lynis 2.4.1 - Help
=====

Commands:
audit
show
update
upload-only

Use 'lynis show help <command>' to see details

Options:
--auditor
--check-all (-c)
--config
--cronjob (--cron)
--debug
--developer
--help (-h)
--license-key
--log-file
--manpage (--man)
--no-colors --no-log
--pentest
--profile
--plugins-dir
--quiet (-q)
--quick (-Q)
```

Best Practices for CLI

- Share progress
- Dots

```
[+] Plugins (phase 1)
-----
Note: plugins have more extensive tests and may take several minutes to complete

- Plugin: compliance
  [...]
- Plugin: configuration
  [...]
- Plugin: control-panels
  [...]
- Plugin: crypto
  [...]
- Plugin: docker
  [...]
- Plugin: file-integrity
  [.....]
- Plugin: file-systems
  [.....]
```

Best Practices for CLI

- Use exit codes
- Data output
- Integrations

```
Lynis security scan details:

Hardening index : 63 [#####          ]
Tests performed : 228
Plugins enabled : 14

Components:
- Firewall           [V]
- Malware scanner    [X]

Lynis Modules:
- Compliance Status [?]
- Security Audit     [V]
- Vulnerability Scan [V]

Files:
- Test and debug information : /tmp/lynis.log
- Report data                : /tmp/lynis-report.dat
```

Updates

- Newer is better?
- Perform update check
- Make it easy

Releases

- Release often
- Who picks it up?
- RSS

Trick

<https://github.com/CISOfy/lynis/releases.atom>

Packages

Good

- Promotion
- Easy of use

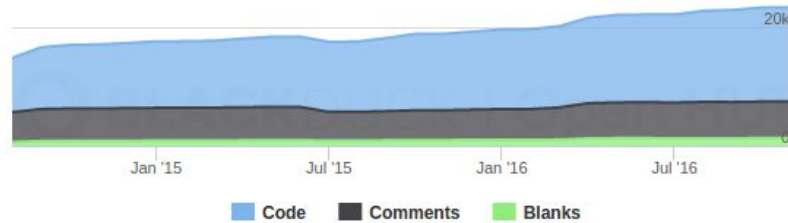
Bad

- Needs maintainer
- The “stable” bug

OpenHub

Code

Lines of Code



In a Nutshell, Lynis...

- ... has had 1,651 commits made by 51 contributors representing 15,946 lines of code
- ... is mostly written in shell script with a very well-commented source code
- ... has a young, but established codebase maintained by a very large development team with increasing Y-O-Y commits
- ... took an estimated 4 years of effort (COCOMO model) starting with its first commit in August, 2014 ending with its most recent commit 4 days ago

See more details: [OpenHub](#)

Takeaways

- Structure
- Simplicity
- Quality

High-hanging fruit

Sites about news/tools

CRON.WEEKLY

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*I respect your privacy and you won't get spam. Ever.
Just a weekly newsletter about Linux and open source.*

**issue #53: RHEL 7.3, fpm, kpatch, sshesame, Minoca OS,
Lynis & many more!**

November 6, 2016 - Mattias Geniar

Welcome to *cron.weekly* issue #53 for Sunday, November 6th, 2016!

GitHub

CISOfy / lynis

Unwatch ▾

187

★ Unstar

2,737

Fork

293

Code

Issues 24

Pull requests 0

Projects 3

Wiki

Pulse

Graphs

Settings

Lynis - Security auditing tool for Linux, macOS, and UNIX-based systems. Assists with compliance testing (HIPAA/ISO27001/PCI DSS) and system hardening. Agentless, and installation optional. <https://cisofy.com/lynis/> — Edit

1,665 commits

1 branch

14 releases

48 contributors

GPL-3.0

Referral

A must-use tool

If you're a system administrator, a good auditing tool can make your life exponentially easier (or harder...depending upon the results of the audit). Lynis is a must-use tool for any Linux system administrator who takes the security of their systems and network seriously.

Give this tool a try, and see if it detects holes in the armor of your Linux systems.



Social Media

- Interact
- Share at the right time
- Challenge



Lorenzo Scalfani @lorenzoscalfani 3d
The creator of two tools I am using to research replied me. I'm running in circles.

Michael Boelen @mboelen
in reply to Lorenzo Scalfani
[@lorenzoscalfani](#) as you seem to like Linux security, have a look at [linux-audit.com](#) - may be a great source for inspiration :)



← in reply to Michael Boelen



Lorenzo Scalfani @lorenzoscalfani 3d
[@mboelen](#) ohhh, that's very kind from you! I installed Linux 3 days ago for the 1st time, so it will take a while before understanding this.



Takeaways

- Know good sources
- Share and promote
- Monitor activity

LE
TM

PLAY 3 CREDITS

GOOD LUCK

ALL WINNING SYMBOLS MUST BE BISECTED BY THE PAYLINE

7

DOUBLE

7

DOUBLE

7

DOUBLE

High traffic websites

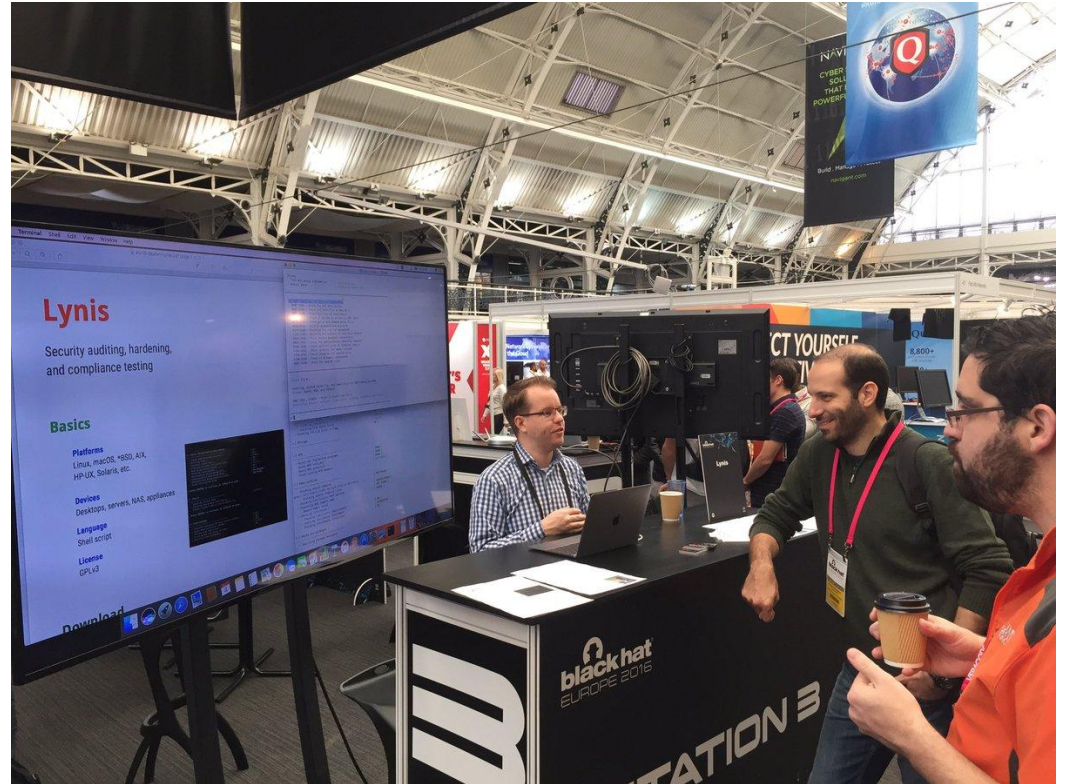
- Hacker News
- Reddit
- Slashdot
- TechRepublic

Quality traffic (for security)

- Packet Storm Security
- ToolsWatch

Jackpot

Personal
Direct feedback
Fans



HN Effect

Traffic

2016-11-04: 4478

2016-11-05: 1656

2016-11-06: 1201



2,054
Unique cloners



HN Effect

Stars

2016-11-02: 1110

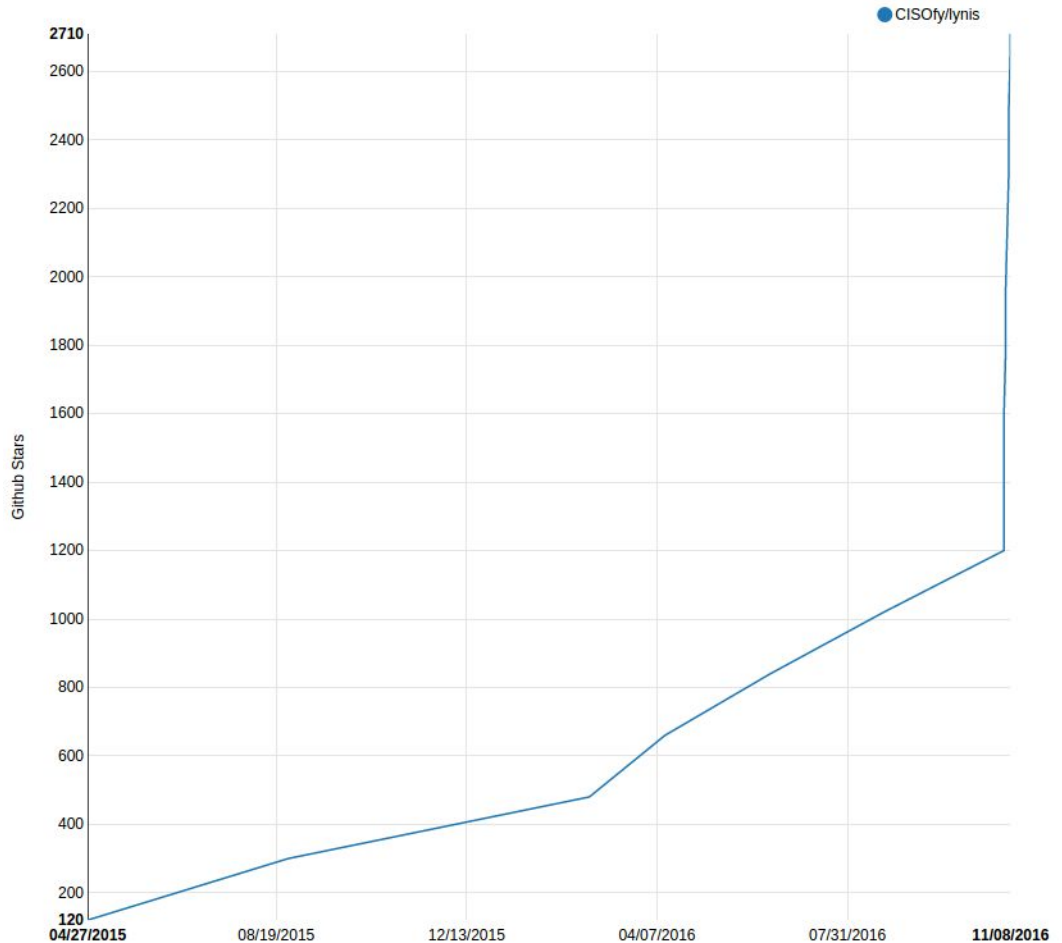
2016-11-04: 1200

2016-11-05: 1770

2016-11-06: 2130

2016-11-07: 2340

2016-11-08: 2670



Source: <http://www.timqian.com/star-history/#CISOfy/lynis>

GitHub (Trending)

Trending in open source

See what the GitHub community is most excited about today.

Repositories Developers Trending: today ▾ All languages


Unknown languages
C
Rust
Shell

Other: Languages ▾

ProTip! Looking for recently updated repositories? Try this search


CISOfy / lynis ★ Unstar

Lynis - Security auditing tool for Linux, macOS, and UNIX-based systems. Assists with compliance testing (HIPAA/ISO27001/PCI DSS) and system hardening. Agentless and installation is optional.

● Shell ★ 1864 🍴 241 Built by  ★ 619 stars today

FreeCodeCamp / FreeCodeCamp ★ Star

The <https://FreeCodeCamp.com> open source codebase and curriculum. Learn to code and help nonprofits.

● JavaScript ★ 191423 🍴 7,375 Built by  ★ 493 stars today

Side effects

SECURITY

How to quickly audit a Linux system from the command line

For a deep penetrating scan of your Linux servers and desktops, turn to the Lynis auditing tool. Check out how to install and use Lynis.

By Jack Wallen | November 7, 2016, 12:53 PM PST



THN The Hacker News shared a link.
November 7 at 7:22am · €

```
- Search administrator accounts... [ OK ]
- Checking UPE... [ OK ]
- Checking chkrootkit tool... [ FOUND ]
- Consistency check /etc/group file... [ OK ]
- Test group files (groups)... [ OK ]
- Checking login shells... [ WARNING ]
- Checking non unique group ID's... [ OK ]
- Checking non unique group names... [ OK ]
- Checking LDAP authentication support [ NOT ENABLED ]
- Check /etc/passwd file [ NOT FOUND ]

[ Press [ENTER] to continue, or [CTRL]+C to stop ]

[+] Shells
-----
- Checking osanle TTY... [ WARNING ]
- Checking shells from /etc/shells...
Result: found 6 shells (valid shells: 6).

[ Press [ENTER] to continue, or [CTRL]+C to stop ]

[+] File systems
-----
- [FreeBSD] Querying NFS mount points (fstab)... [ OK ]
```

Lynis - Security auditing tool for Linux, MacOS, and UNIX-based systems

lynis - Lynis - Security auditing tool for Linux, macOS, and UNIX-based systems. Assists with compliance testing (HIPAA/ISO27001/PCI DSS) and system...

GITHUB.COM

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1.8K Top Comments

477 shares

Write a comment...
Press Enter to post.

Hacking Samantha Can anyone help me in installation of Kali Linux in android??
Like · Reply · 3 · November 7 at 1:21pm
6 Replies

Ayman Abbas Respect
Like · Reply · 1 · November 7 at 7:49am

View 17 more comments

The “sticky” effect

There is more behind the peak



Jackpot Multipliers

- Ask
- Networking
- Persistence

Lessons learned

1 - Be a Marketeer

Promotion is needed

2 - Humble versus Pride

Balance

3 - Quality

It takes time:

- Get the basics right
- Focus on simplicity
- Understand your users

More?

Articles on **linux-audit.com**

- [Why we use your open source project \(or not\)](#)
- [How to Promote your Open Source Project](#)

Share this presentation! ;-)

Questions?

Connect

- Twitter ([@mboelen](https://twitter.com/mboelen))
- LinkedIn ([Michael Boelen](https://www.linkedin.com/in/michaelboelen))

