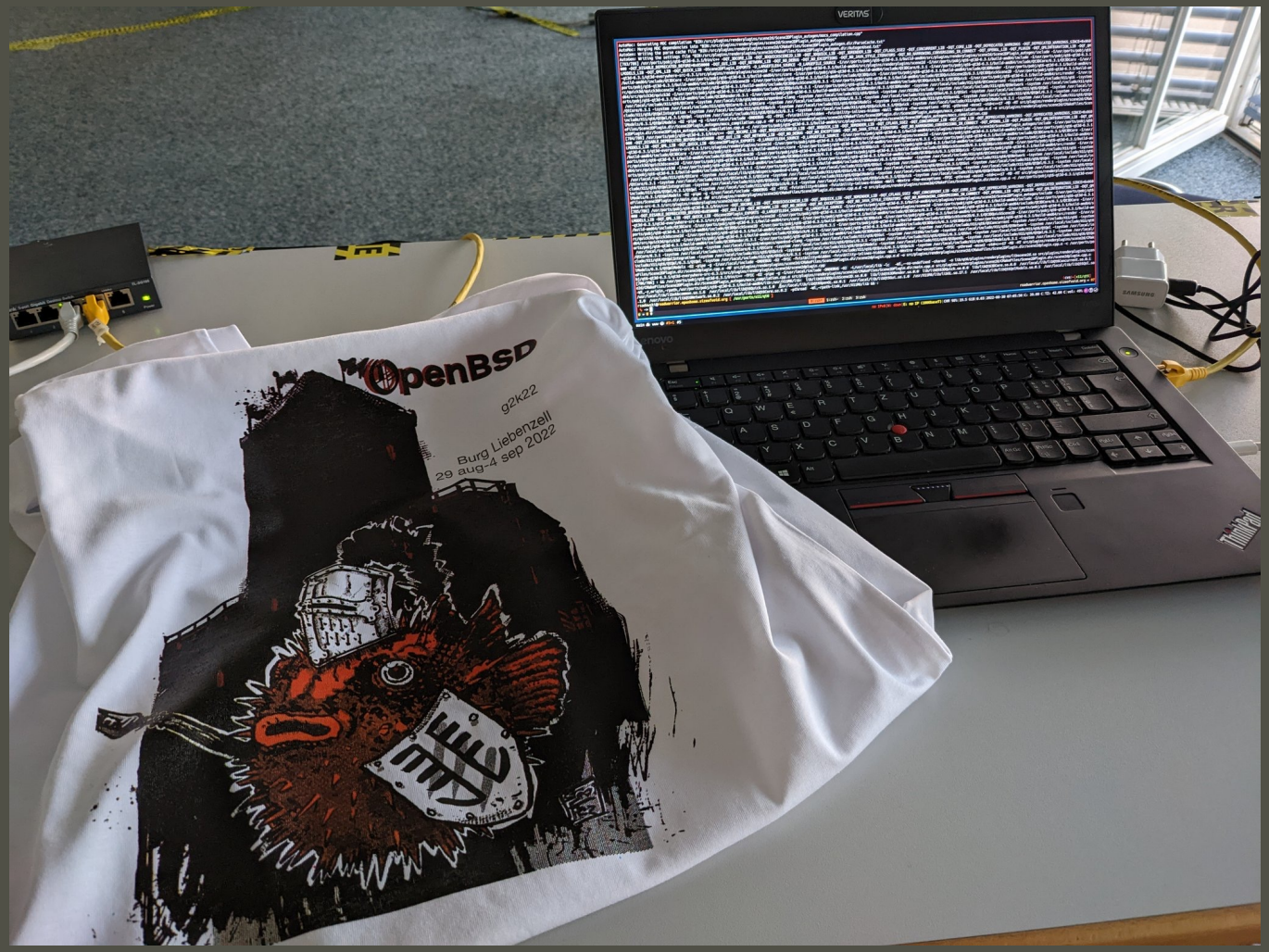


OPENBSD PACKAGES

EXPERIENCE AS MAINTAINER
500 LIBS & APPS MADNESS

whoami(1)

DON'T BE JUST ANOTHER BRICK IN A WALL

rafael.sadowski@**computacenter.com**

rsadowski@**openbsd.org**

rs@**rsadowski.de**

rs@**sizeofvoid.org**

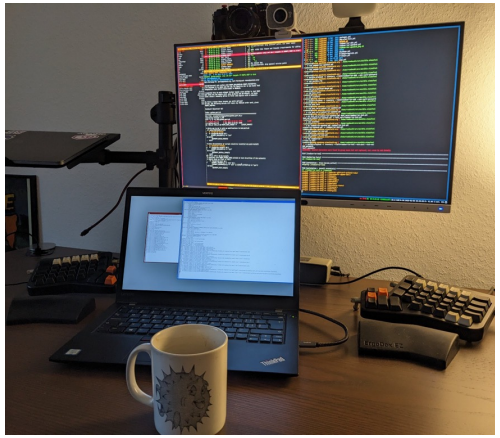
@Nürnberg

AGENDA

OpenBSD

SHUT UP AND HACK

The OpenBSD project produces a FREE, multi-platform 4.4BSD-based UNIX-like operating system.



Maintaining packages

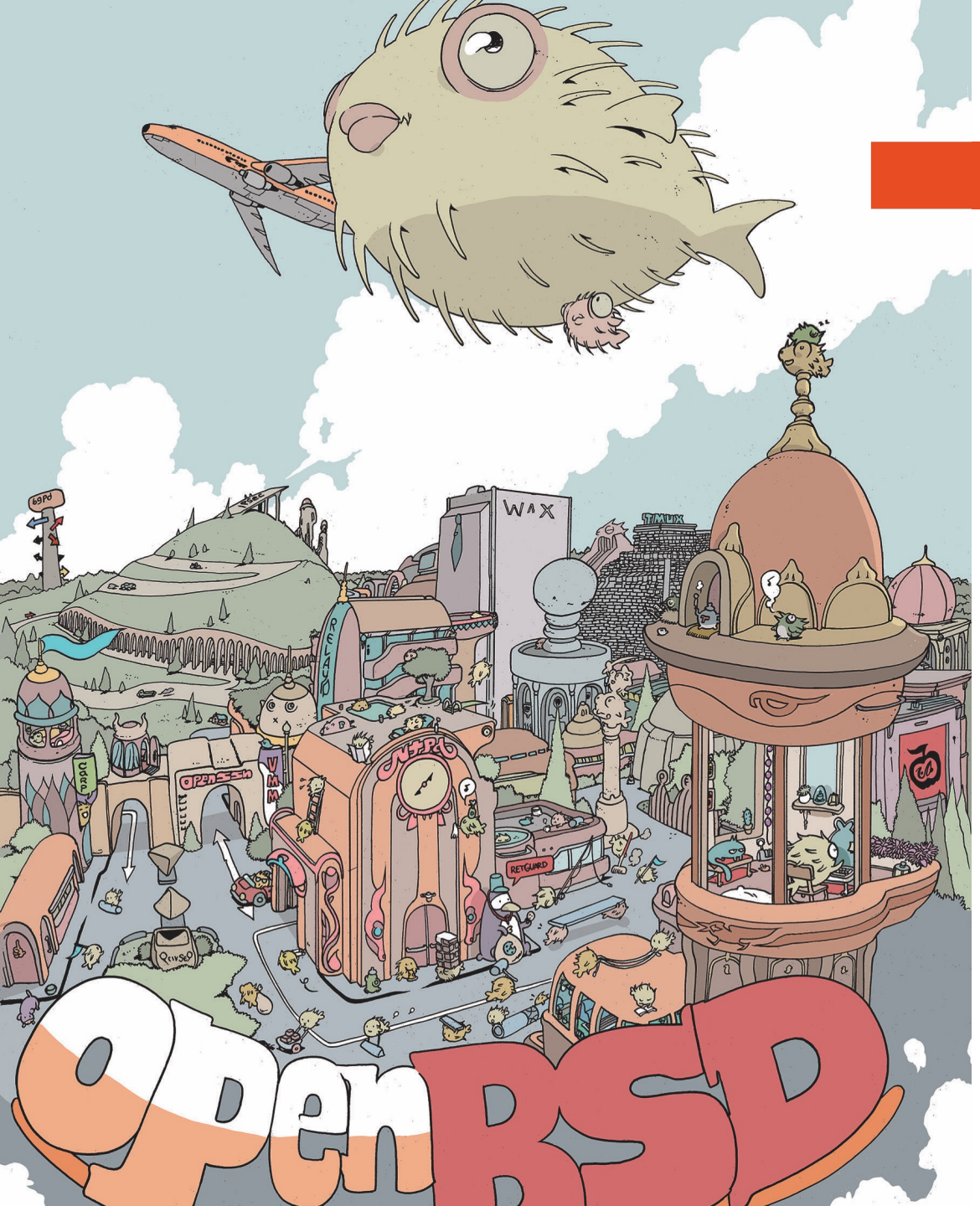
COMPILE ERROR EVERYWHERE

The more you give it away, the more it comes back

OpenSource

COMMUNITIES AND RELEASES

In real open source, you have the right to control your own destiny.



OPENBSD

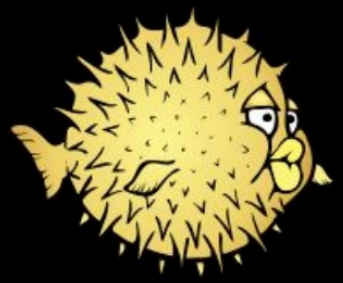
- **FREE**, multi-platform 4.4BSD-based UNIX-like **operating system**
- amd64, arm64, arm, i386, mipse64 powerpc, powerpc64, riscv64, sparc64
- -release, -stable, -current

OPENBSD - PROJECT GOALS

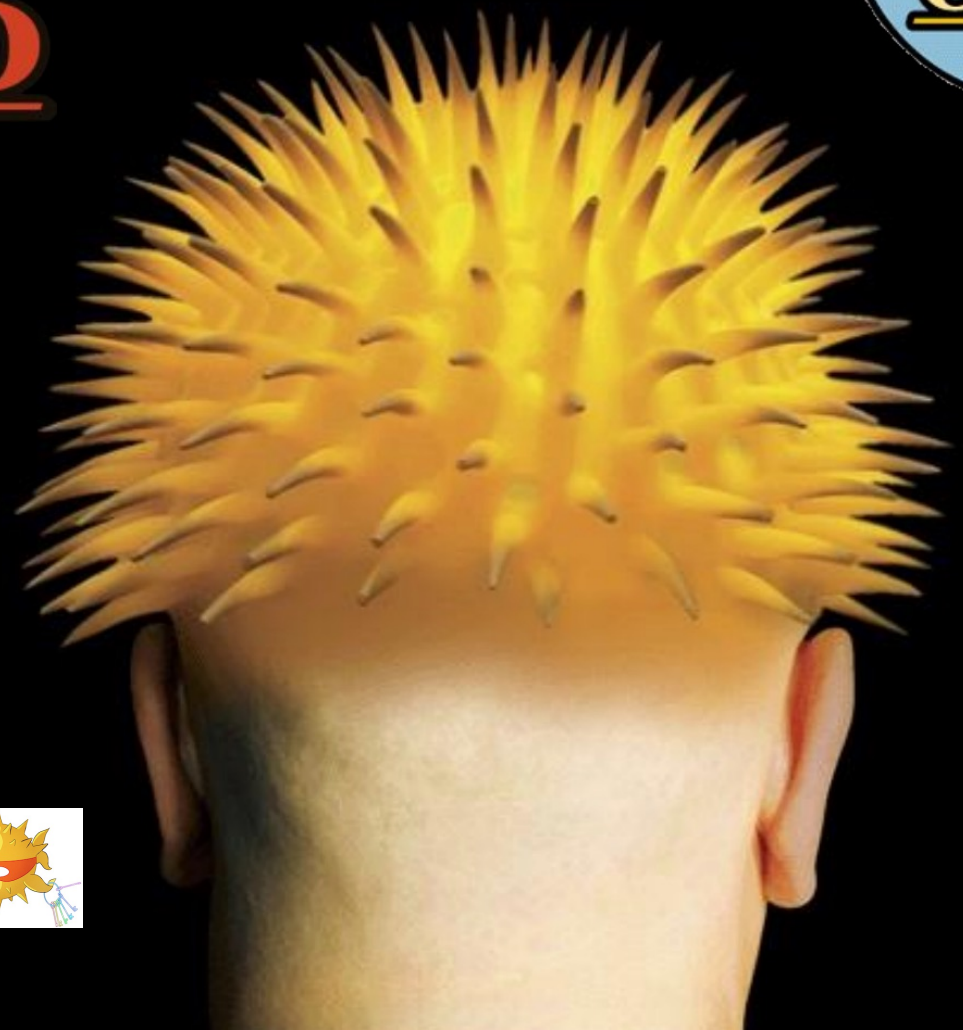
- "Try to be the #**1 most secure** operating system.“
- Provide the best possible **development platform**.
- Only use software that is subject to free licenses.
- Standards (ANSI, POSIX, parts of X/Open, etc.)
- Policy-free for this technical decisions.
- Releases at regular intervals ~6 months.

OPENBSD – NICE TO KNOW

- Theo de Raadt - Team leader and motivator
- ~80 Developer
- OpenBSD Foundation
- Sub system driven ownership
- Disconnected releases and packages
- No cross-compiling
- Evolution instead of revolution



OpenBSD



LibreSSL

tmux

rpki-client

...and more

SHOULD I USE?

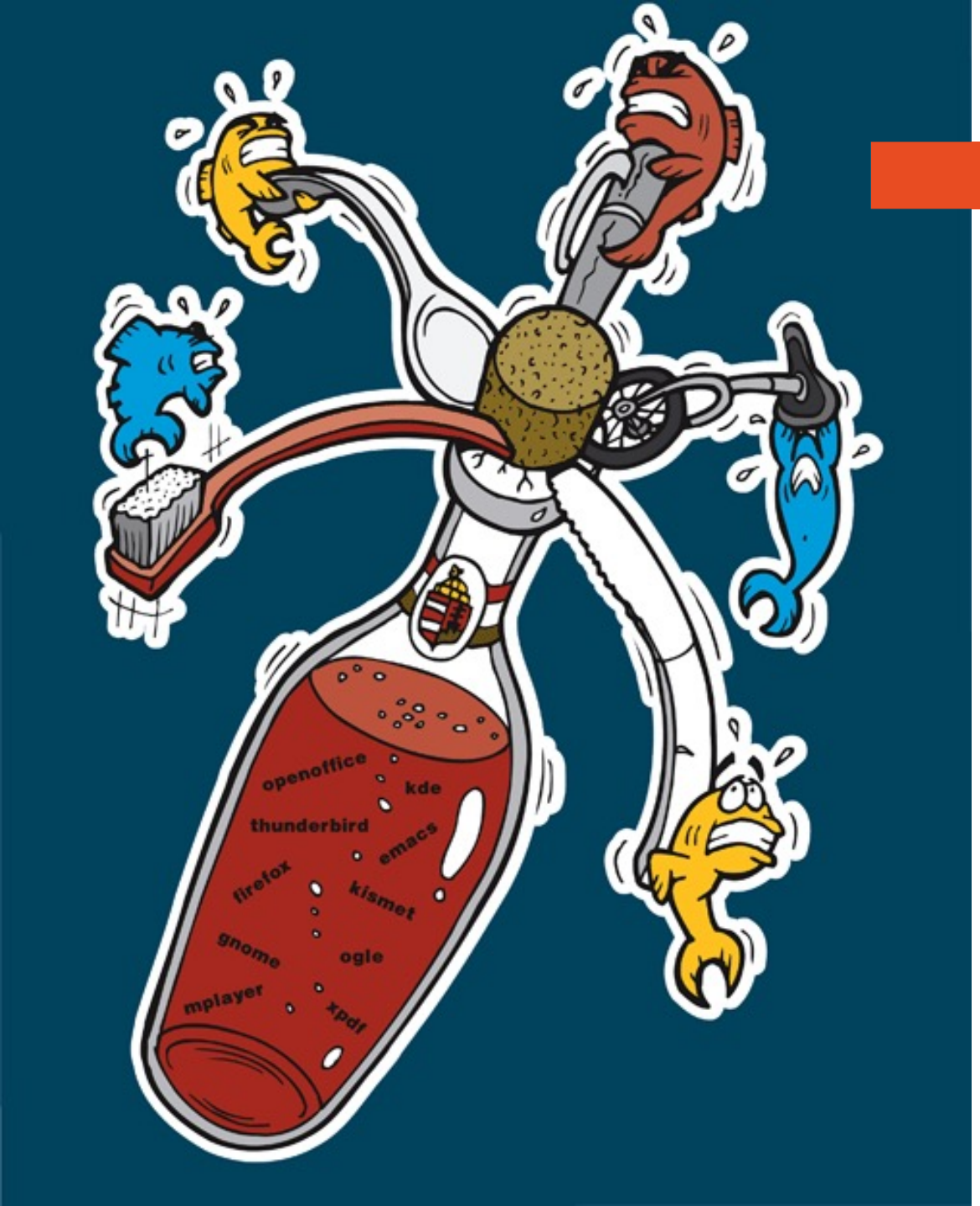
PROS

- Packet Filter : super awesome firewall
- Sane defaults : you install, it works, no tweak
- Stability : upgrades go smooth and are easy
- OpenBSD (security) innovations
- Server and desktop ENV
- New and stable packages
- Lot of in-house development

VS

CONS

- Has only FFS file system, which is slow and has no “feature”
- No bluetooth support
- No USB3 full speed performance
- No VM guest additions
- No nvidia support (nvidia’s fault)
- No container / docker / jails
- Poor FUSE support (it crashes quite often)



MAINTAINING PACKAGES

- The OpenBSD way of packages / ports
- My work-flow
- Ask the (social) internet

packages(7) / ports(7)

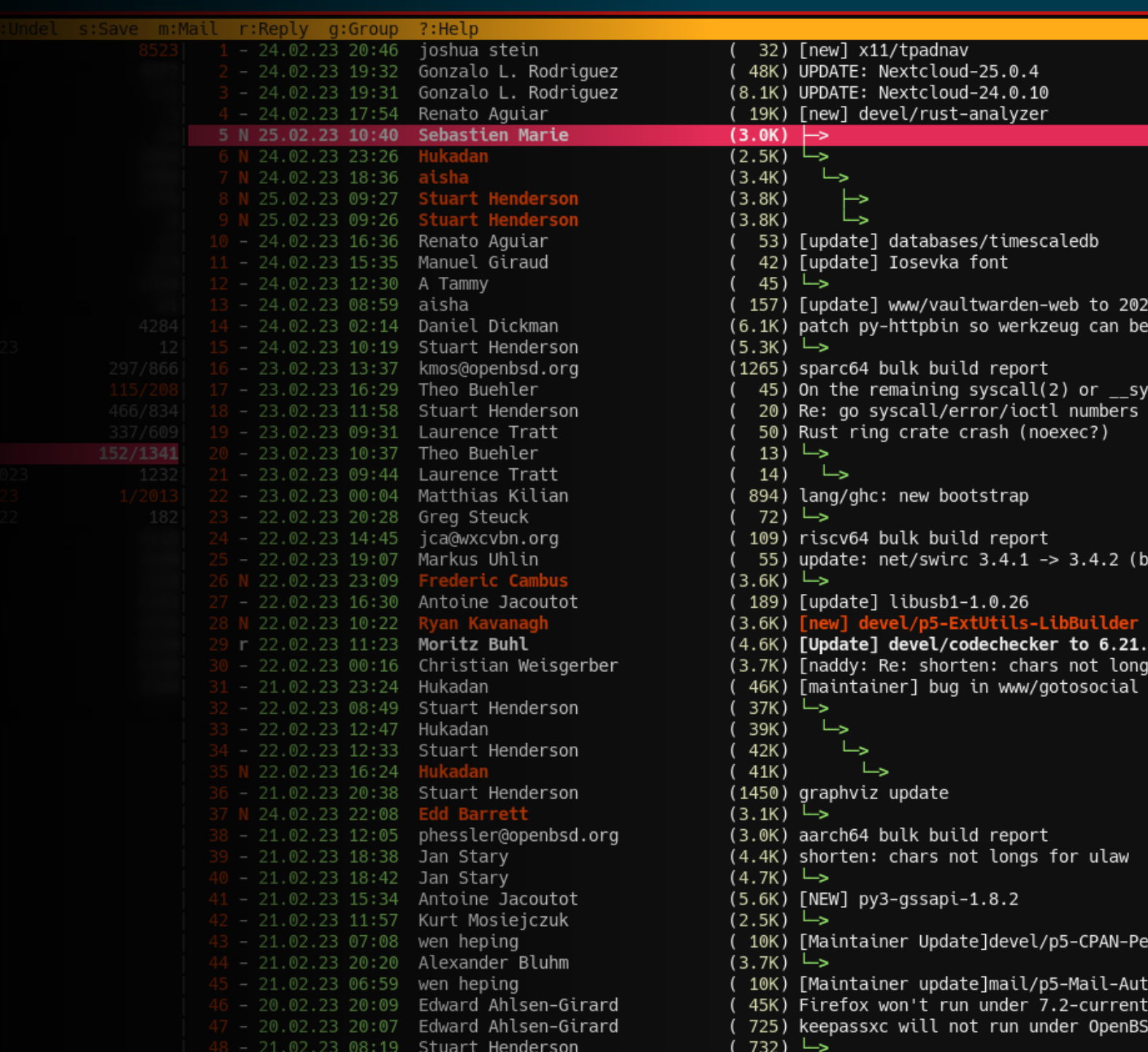
THE MORE YOU GIVE IT AWAY, THE MORE IT COMES BACK

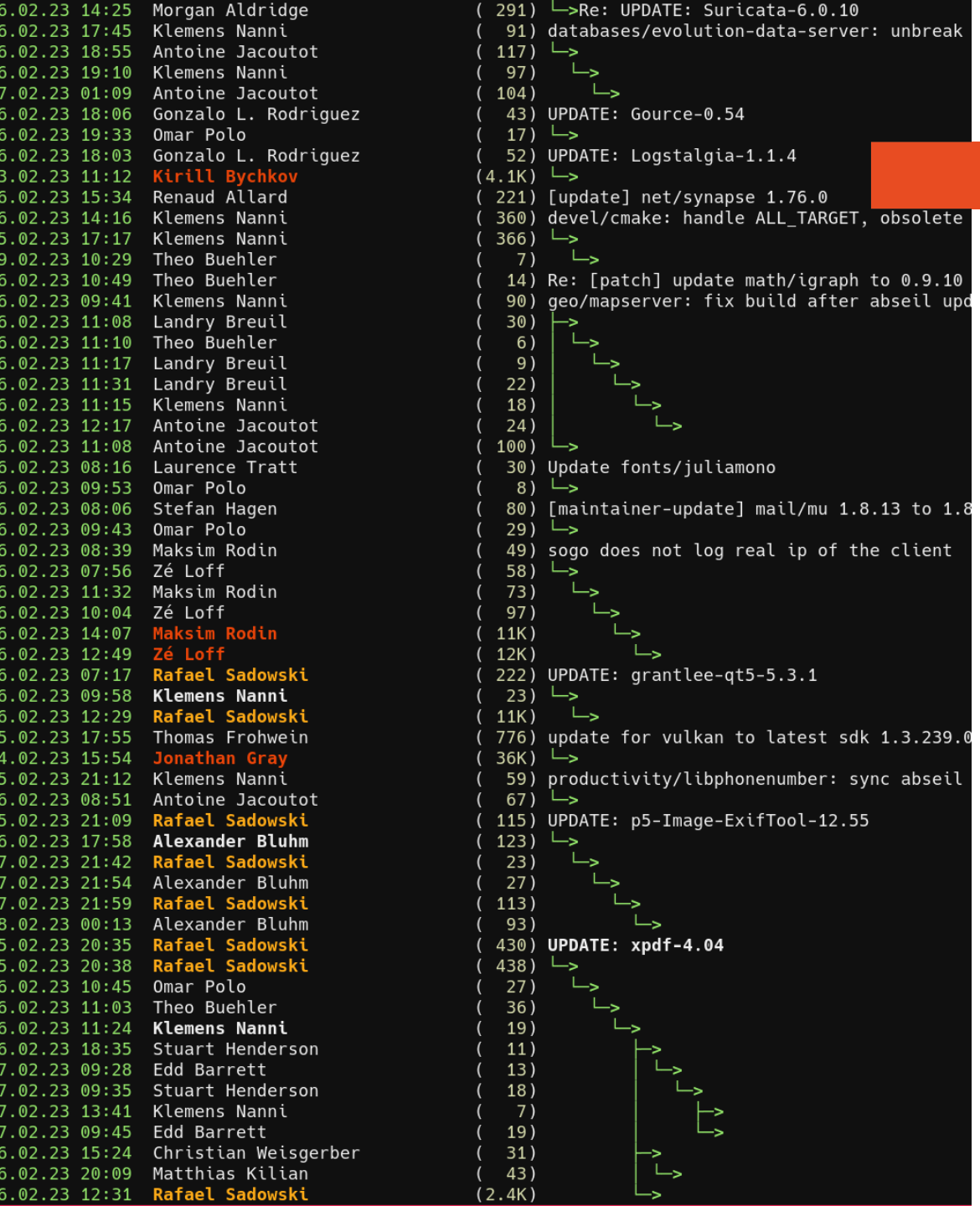
Doxygen

OpenCV

Qt

Way of hacking - misc@, bugs@, @ports, tech@ …





WAY OF HACK(ING)

1. misc@, bugs@, @tech, ports@
2. mailinglist, chat (invitation)
3. Ok? Ok! - four-eyes principle
4. Commit (CVS)
5. Take care

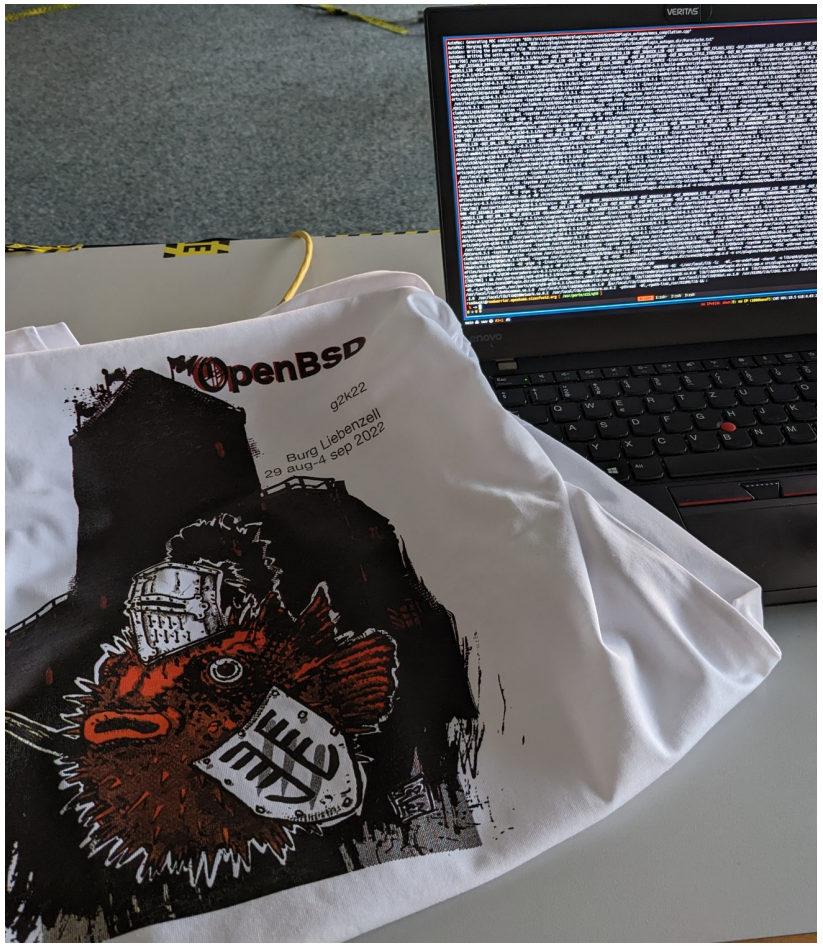
OK?

```
From: Rafael Sadowski <rafael@sizeofvoid.org>
Date: Mon, 6 Feb 2023 07:17:58 +0100
Subject: UPDATE: grantlee-qt5-5.3.1
To: The OpenBSD ports mailing-list <ports@openbsd.org>

Update grantlee-qt5 to 5.3.1. All consumers built without issues
OK with bump consumers because of the shared lib path change in PLIST?

Rafael

Index: x11/grantlee-qt5/Makefile
===================================================================
RCS file: /cvs/ports/x11/grantlee-qt5/Makefile,v
retrieving revision 1.12
diff -u -p -r1.12 Makefile
--- x11/grantlee-qt5/Makefile   28 May 2022 06:20:03 -0000      1.12
+++ x11/grantlee-qt5/Makefile   6 Feb 2023 06:15:08 -0000
@@ -1,16 +1,15 @@
-COMMENT =              template and text document library for Qt5
+COMMENT =      template and text document library for Qt5

-VERSION =              5.2.0
-PKGNAME =              grantlee-qt5-${VERSION}
-DISTNAME =             grantlee-${VERSION}
-REVISION =             2
+V =            5.3.1
+PKGNAME =      grantlee-qt5-${V}
+DISTNAME =     grantlee-${V}

-SHARED_LIBS +=  Grantlee_Templates        1.0 # 5.1
-SHARED_LIBS +=  Grantlee_TextDocument     0.0 # 5.1
+SHARED_LIBS +=  Grantlee_Templates        1.1 # 5.1
+SHARED_LIBS +=  Grantlee_TextDocument     0.1 # 5.1

-CATEGORIES =           devel x11
+CATEGORIES =   devel x11

-HOMEPAGE =             https://github.com/steveire/grantlee
+HOMEPAGE =     https://github.com/steveire/grantlee

 # LGPLv2.1
 PERMIT_PACKAGE =       Yes
@@ -18,21 +17,18 @@ PERMIT_PACKAGE =    Yes
 WANTLIB += ${COMPILER_LIBCXX} Qt5Core Qt5Gui Qt5Network Qt5Qml
 WANTLIB += c m
```

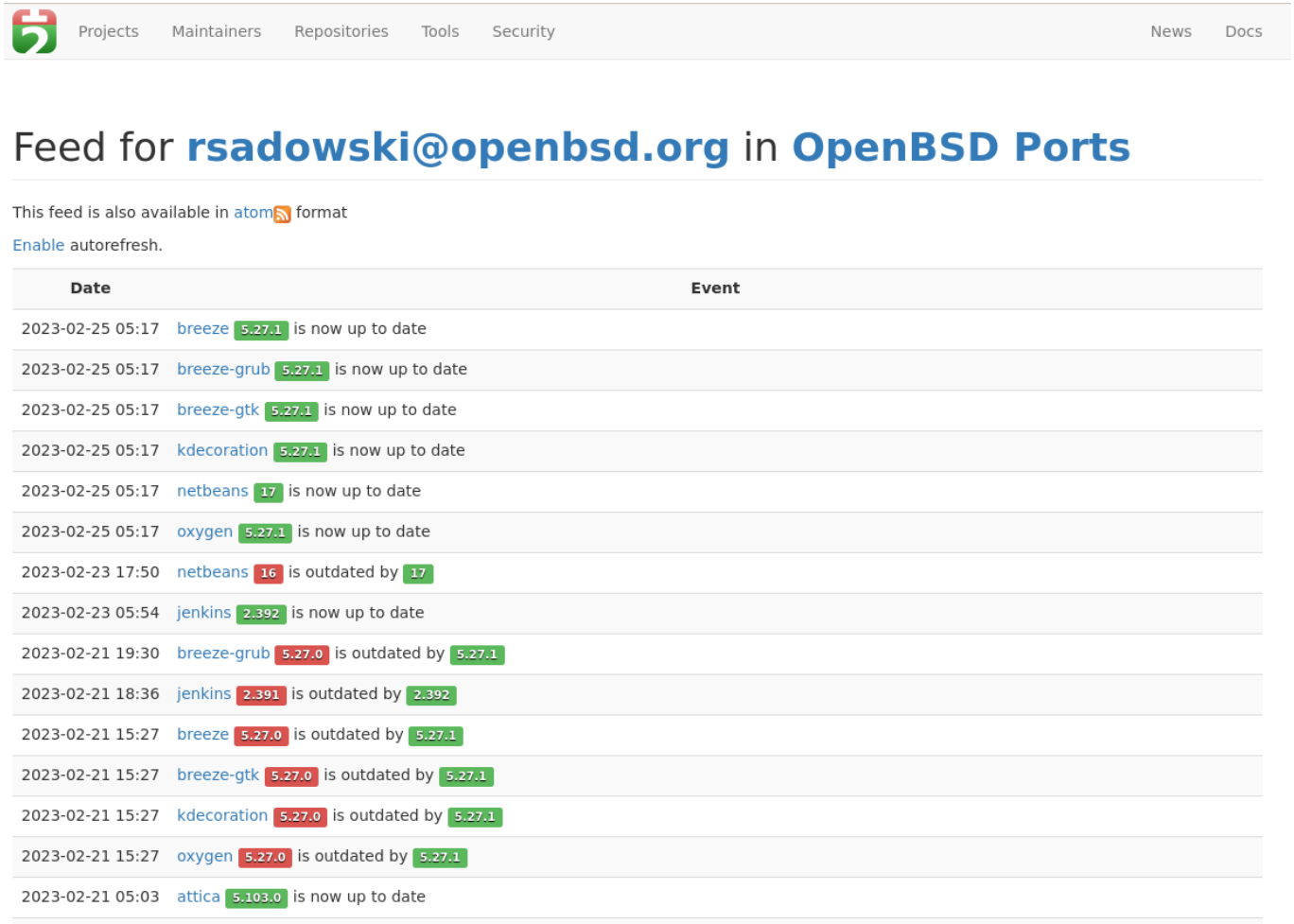
OK! COMMIT

```
From: Rafael Sadowski <rsadowski@cvs.openbsd.org>
Date: Thu, 9 Feb 2023 14:02:39 -0700 (MST)
Subject: CVS: cvs.openbsd.org: ports
To: ports-changes@cvs.openbsd.org

CVSROOT:        /cvs
Module name:    ports
Changes by:     rsadowski@cvs.openbsd.org       2023/02/09 14:02:39

Modified files:
        x11/grantlee-qt5: Makefile distinfo
        x11/grantlee-qt5/pkg: PLIST
        x11/kde-applications/grantleetheme: Makefile
        x11/kde-applications/grantleetheme/pkg: PLIST
        x11/kde-applications/kcalutils: Makefile
        x11/kde-applications/kcalutils/pkg: PLIST

Log message:
Update x11/grantlee-qt5 to 5.3.1 and bump/regen consumers

Feedback from kn@
```

WAY OF HACKING - OPENBSD HACKATHONS



DAILY WORK #1



Projects Maintainers Repositories Tools Security News Docs

Feed for rsadowski@openbsd.org in OpenBSD Ports

This feed is also available in atom format

Enable autorefresh.

Date	Event
2023-02-25 05:17	breeze 5.27.1 is now up to date
2023-02-25 05:17	breeze-grub 5.27.1 is now up to date
2023-02-25 05:17	breeze-gtk 5.27.1 is now up to date
2023-02-25 05:17	kdecoration 5.27.1 is now up to date
2023-02-25 05:17	netbeans 17 is now up to date
2023-02-25 05:17	oxygen 5.27.1 is now up to date
2023-02-23 17:50	netbeans 16 is outdated by 17
2023-02-23 05:54	jenkins 2.392 is now up to date
2023-02-21 19:30	breeze-grub 5.27.0 is outdated by 5.27.1
2023-02-21 18:36	jenkins 2.391 is outdated by 2.392
2023-02-21 15:27	breeze 5.27.0 is outdated by 5.27.1
2023-02-21 15:27	breeze-gtk 5.27.0 is outdated by 5.27.1
2023-02-21 15:27	kdecoration 5.27.0 is outdated by 5.27.1
2023-02-21 15:27	oxygen 5.27.0 is outdated by 5.27.1
2023-02-21 05:03	attica 5.103.0 is now up to date

https://repology.org/

DAILY WORK #1

Repository **OpenBSD Ports**

Enable autorefresh.

Links

- OpenBSD FAQ: Packages and Ports
- openports.pl
- OpenBSD ports CVS repository

Packages

Total	Newest	Outdated	Ignored
11558	6637	3402	46

Projects

Total	Newest	Outdated	Unique
8944	5599	2470	715

https://repology.org/

DAILY WORK #2

Maintainer **rsadowski@openbsd.org**

Contact

- **E-Mail:** rsadowski@openbsd.org

Repository activity

		Projects							
Repository	**Packages**	**Total**	**Newest**		**Outdated**		**Problematic**	**Potentially vulnerable**		**Other lists**	**Feeds**
OpenBSD Ports	**499**	**354**	**347**	**98.0%**	**7**	**2.0%**	-	**1**	**0.28%**	HCO LN ∗ U Problems	html, atom
Total	**499**	**354**	**347**	**98.0%**	**7**	**2.0%**	-	**1**	**0.28%**	HCO LN ∗ U	

https://repology.org/

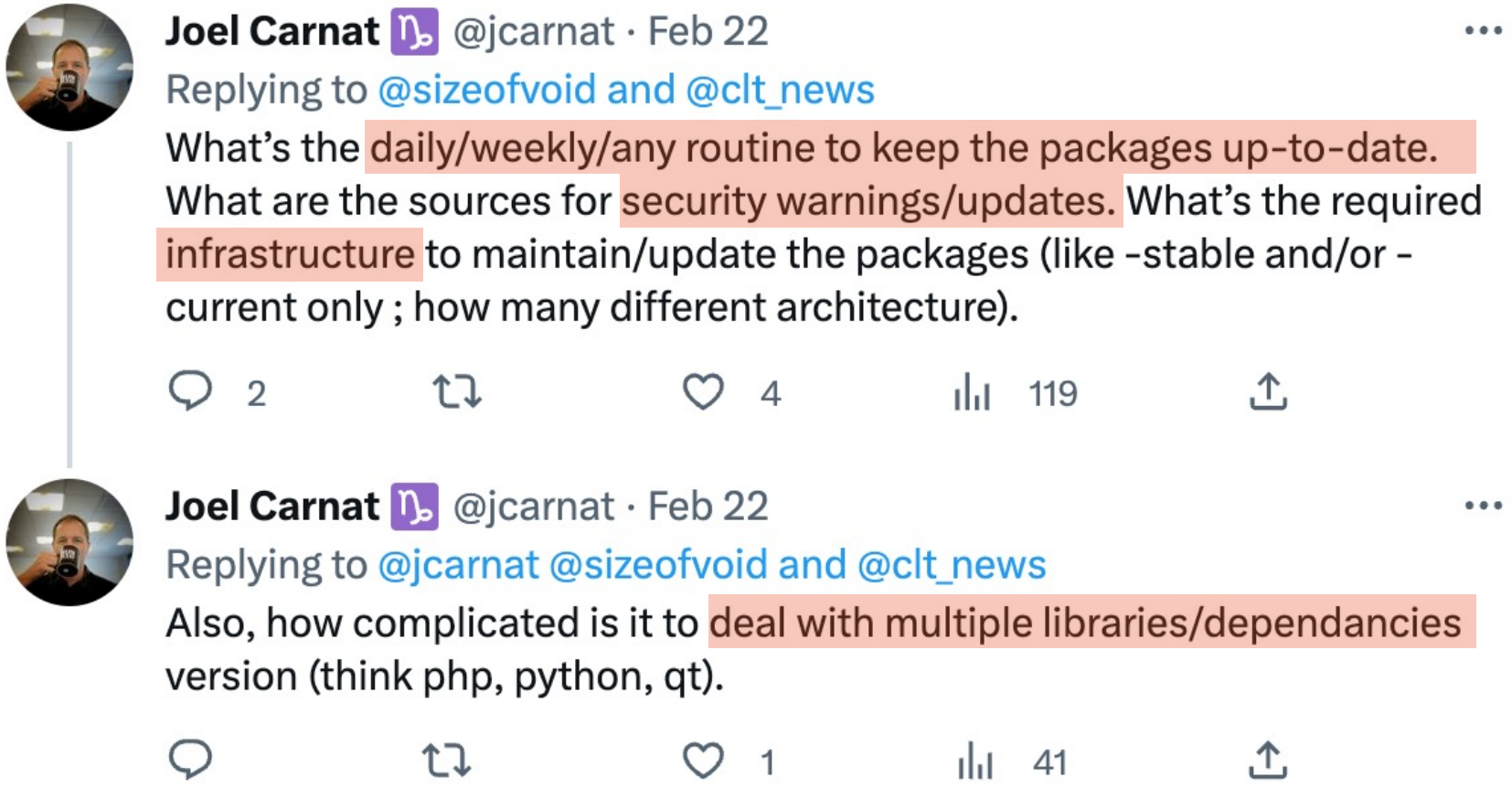
ASK THE INTERNET

Rafael Sadowski
@sizeofvoid

I will give a talk about the topic "OpenBSD Packages - Experiences as maintainer of 500 Apps" at the #CLT @clt_news. If you were in this talk, what questions would you like answered? What topics would you like to hear about ? Thanks in advance!

8:10 PM · Feb 22, 2023 · **1,207** Views

ASK THE INTERNET (1/4)



Joel Carnat @jcarnat · Feb 22

Replying to @sizeofvoid and @clt_news

What's the daily/weekly/any routine to keep the packages up-to-date. What are the sources for security warnings/updates. What's the required infrastructure to maintain/update the packages (like -stable and/or -current only ; how many different architecture).

2 4 119

Joel Carnat @jcarnat · Feb 22

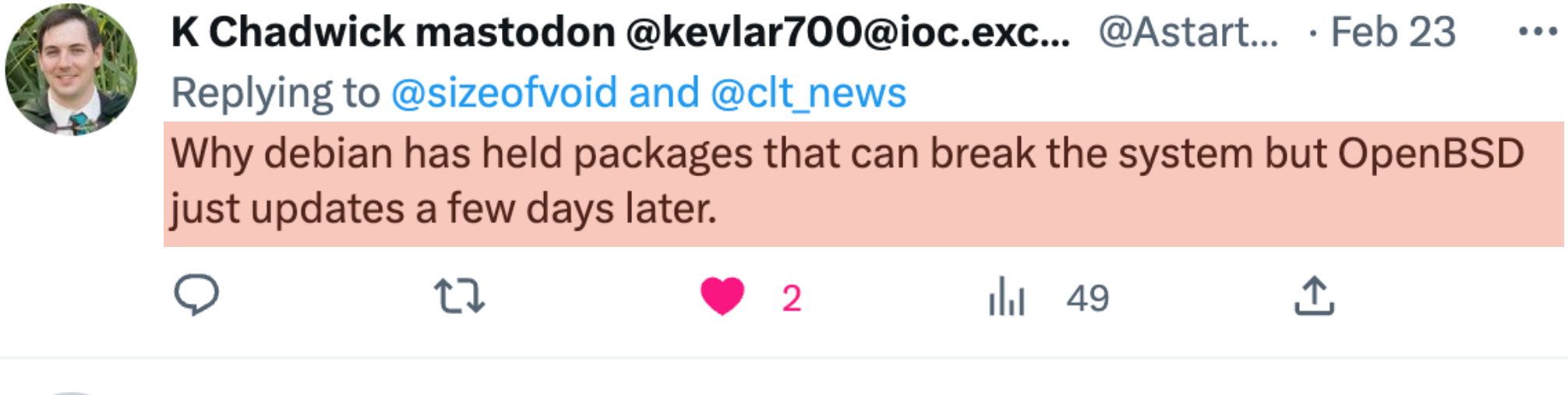
Replying to @jcarnat @sizeofvoid and @clt_news

Also, how complicated is it to deal with multiple libraries/dependancies version (think php, python, qt).

1 41

ASK THE INTERNET (2/4)

ASK THE INTERNET (3/4)



K Chadwick mastodon @kevlar700@ioc.exc... @Astart... · Feb 23

Replying to @sizeofvoid and @clt_news

Why debian has held packages that can break the system but OpenBSD just updates a few days later.

2 49

ASK THE INTERNET (4/4)

iG® @igC2AE · Feb 24

Replying to @sizeofvoid and @clt_news

One is motivated to participate as a new maintainer as a member of a team or as an individual. Which app to look at, how to approach and where to start? I am suitable for any type of maintenance work and if not how to skill up?

4

OPEN SOURCE

- Ecosystem
- Modern new world
- Software release life cycle and dependencies

ECOSYSTEM

IN REAL OPEN SOURCE, YOU HAVE THE RIGHT TO CONTROL YOUR OWN DESTINY.

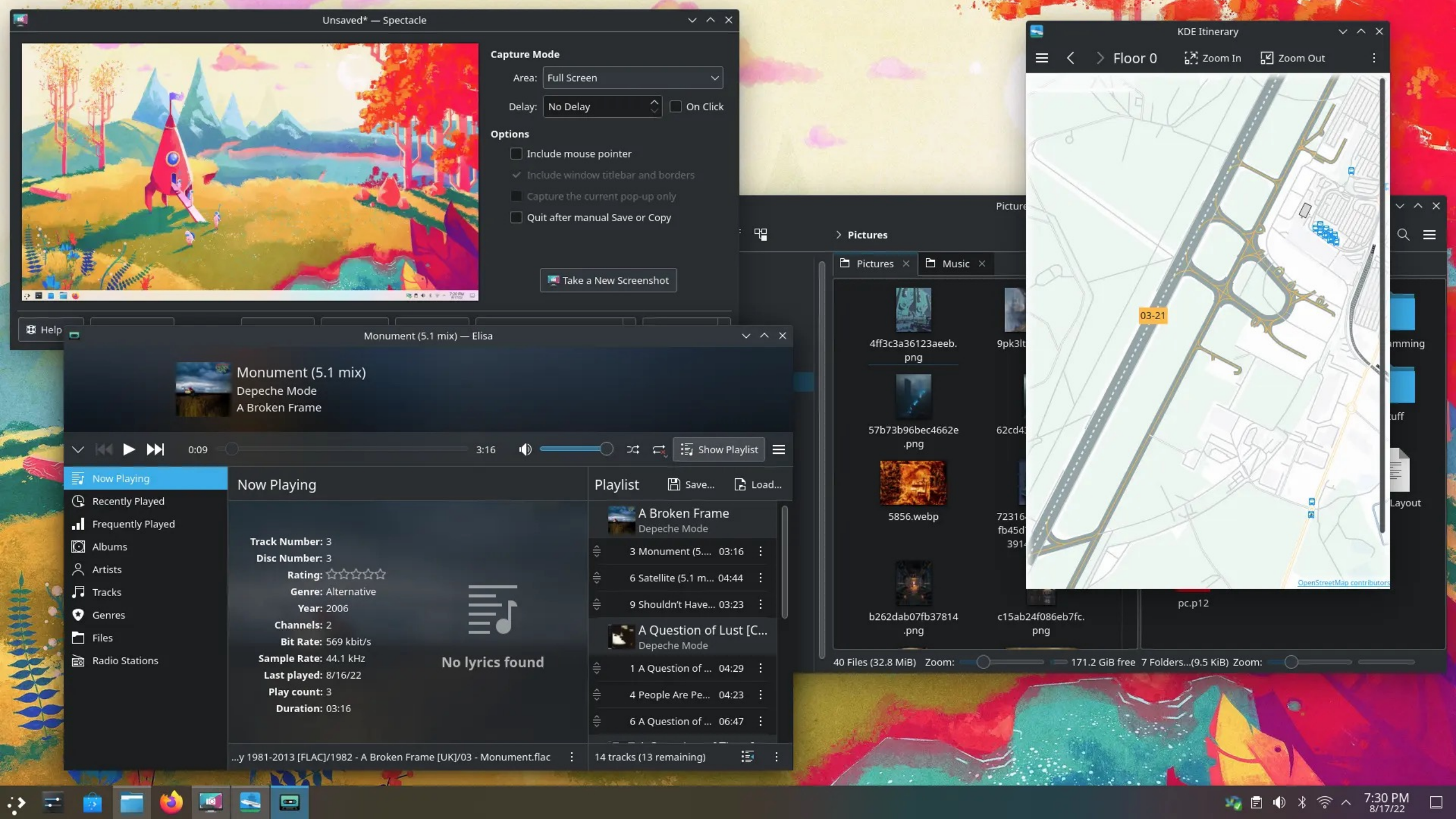
- GitHub, GitLab (Anti Anti Social Club)
- Public cloud, CNCF
- More diversification
  - Go, Rust, JS/TS
- It‘s (all) about the money

OPEN-BSD

Berlin Germany October 17-21 2013

MODERN NEW WORLD

- Public cloud, CNCF
- Modern languages environments
  - Cargo, NPM
  - Dependencies
- SystemD
- Udev, LibInput, Libevdev


Unsaved* — Spectacle
Capture Mode
Area: Full Screen
Delay: No Delay
On Click
Options
Include mouse pointer
Include window titlebar and borders
Capture the current pop-up only
Quit after manual Save or Copy
Take a New Screenshot
Help
KDE Itinerary
Floor 0
Zoom In
Zoom Out
03-21
OpenStreetMap contributors
Pictures
Music
4ff3c3a36123aeeb.png
57b73b96bec4662e.png
5856.webp
b262dab07fb37814.png
c15ab24f086eb7fc.png
pc.p12
40 Files (32.8 MiB) Zoom:
171.2 GiB free
7 Folders...(9.5 KiB) Zoom:
Monument (5.1 mix) — Elisa
Monument (5.1 mix)
Depeche Mode
A Broken Frame
0:09
3:16
Show Playlist
Now Playing
Recently Played
Frequently Played
Albums
Artists
Tracks
Genres
Files
Radio Stations
Now Playing
Track Number: 3
Disc Number: 3
Rating:
Genre: Alternative
Year: 2006
Channels: 2
Bit Rate: 569 kbit/s
Sample Rate: 44.1 kHz
Last played: 8/16/22
Play count: 3
Duration: 03:16
No lyrics found
Playlist
Save...
Load...
A Broken Frame
Depeche Mode
3 Monument (5.... 03:16
6 Satellite (5.1 m... 04:44
9 Shouldn't Have... 03:23
A Question of Lust [C...
Depeche Mode
1 A Question of ... 04:29
4 People Are Pe... 04:23
6 A Question of ... 06:47
...y 1981-2013 [FLAC]/1982 - A Broken Frame [UK]/03 - Monument.flac
14 tracks (13 remaining)
7:30 PM
8/17/22

THE SOFTWARE DEVELOPMENT LIFECYCLE (SDLC)

- KDE {Gear, Plasma} releases ...
- Open Source release cycle going faster
- Bleeding edge open source packages
- Dependency interplay risks

SHUT UP AND HACK

- They called it "**BSD**"! And "**Open**" **because it's always free**
- It is a lot of work to keep package up-to-date!
- **As a developer:** have the distribution of packages in mind
- **As a user:** Support your project (*BSD, GNU/Linux Application)
- Let's talk and exchange
  - rsadowski.de / sizeofvoid.org
  -