
OpenRazer

The past, the present and
the future

Ubuntu Summit 2022

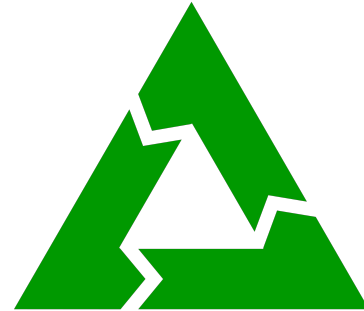
Luca Weiss





Who am I?

- Luca Weiss (z3ntu)
- OpenRazer maintainer
- postmarketOS core team member
- Android Platform Engineer at Fairphone (dayjob)



FAIRPHONE



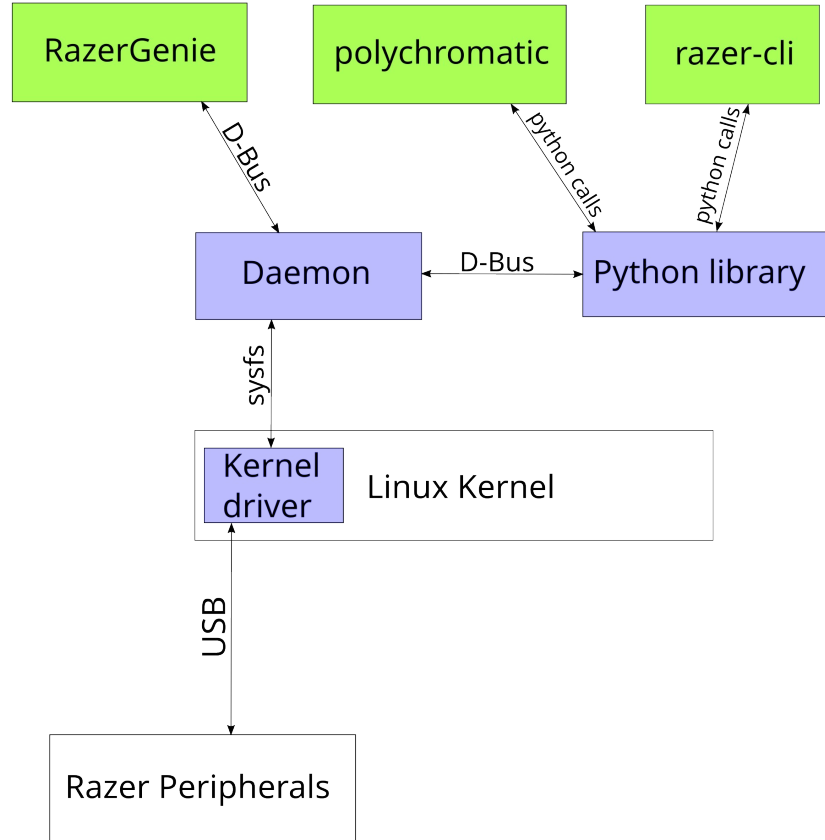
What is OpenRazer?

- Open-source software to control Razer devices on Linux
 - Lighting effects (RGB), brightness, DPI, polling rate, etc.
- Not affiliated with Razer
- 175+ devices supported!
 - Keyboards
 - Laptops
 - Mice
 - Mousemats
 - Keypads
 - Headsets
 - Mug holder
 - Speakers
 - Charging pad
 - Various docks
 - etc...



Architecture

- 3 main components
 - Kernel driver with DKMS (C)
 - Userspace daemon (Python)
 - Python library (Python)
- Razer device protocol
 - USB HID feature reports (90 bytes)





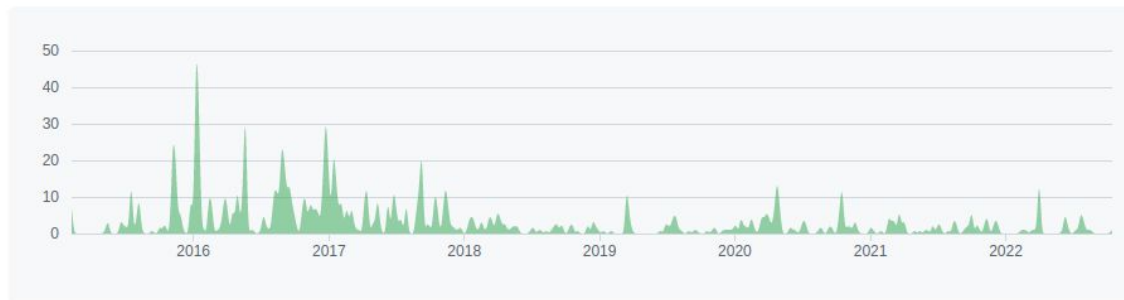
The history

- Initial commit 2015 by Tim Theede as **razer_chroma_drivers**
- Lots of improvements and maintained by Terry Cain as **razer-drivers**
- Renamed to **OpenRazer** in 2017 and maintained by me since then

Feb 8, 2015 – Oct 17, 2022

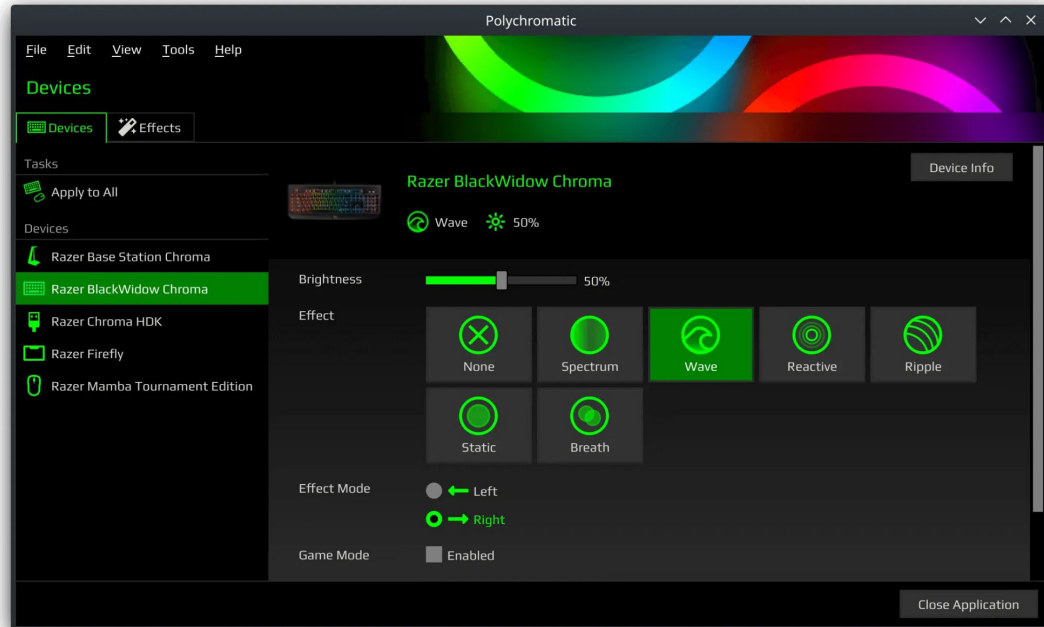
Contributions: Commits ▾

Contributions to master, excluding merge commits and bot accounts



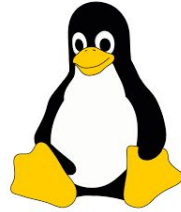
The present

- Active community
- Lots of pull requests (thank you!)
 - 150+ commit authors!
- ~3000 stars on GitHub
- Several UIs (“front-ends”)
 - Polychromatic by Luke Horwell
 - RazerGenie by Luca Weiss (me)
 - Snake by Brett Smith
 - razer-cli by Lorenz Leitner





Linux distributions



- Arch Linux / Manjaro
- Alpine Linux
- Debian / Ubuntu / Linux Mint / elementaryOS / Pop!_OS / Zorin OS
- Fedora / Mageia / openSUSE / RedHat / CentOS
- Gentoo
- NixOS
- Solus
- Slackware
- Void Linux



The future

- Integration tests!
 - More daemon tests with “fake driver”
 - Integration tests with kernel driver
- Hidraw?
 - Kernel driver not necessary for most things
 - Could use hidraw - or not?
 - Mostly abandoned rewrite as “razer_test” using hidapi
- Continue as usual
 - More devices, more fun

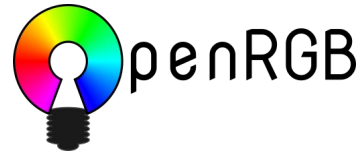


The ecosystem

- razer-macos / FruityRazer
 - Some projects using modified OpenRazer code for macOS support!
- OpenRGB by Adam Honse
 - Cross-manufacturer lighting control
- input-remapper by Tobi (sezanzeb)
 - Change mapping of input devices and macros



Razer macOS
Razer macOS





How you can help

- Add support for new devices
 - They won't add themselves
- Spread the word!
- Contribute other improvements
 - But don't break it ;)

Thanks for listening!

Any questions?

