

Future of Exiv2

2021-02-27

Celebrating
15 / openinventionnetwork®
Years

Agenda

- Join OIN (open invention network)?
- Exiv2 after v0.27.4?

State of Exiv2

History

- *April 2017 v0.26 Released*
- *Backlog of bugs and open issues was cleared*
- *Moved the repos from svn to github*
- *Robin did 95% of the work*
- *Robin asked for help at LGM/Rio*
- *— Status May 2019 —*
- *December 2018 v0.27 Released*
- *3 active contributors Robin, Luis and Dan*
- *GitHub attracted Luis and Dan*
- *Build and test rewritten (Luis and Dan)*
- *Lots of security fixes (team effort).*
- *— 2019/2020 0.27-maintenance —*
- *The "dots" (2019 and 2020)*
- *Bug/security fixes v0.27*
- *Regular/Frequent Releases*
- *No API changes*
- *Deprecation warnings for features dropped in v0.28*
(Video, SSH and EPS)
- *— 2019/2020 master —*
- *v0.28 C++ Modernisation*
- *Most extensive "refactoring" in Exiv2 history*
- *Requires C++11*
- *Remove Video, SSH and EPS support*
- *Code sanitisation*
- *Many API changes and classes rewritten*

Current Status

- *v0.27.3 shipped 2020-06-30*
- *All activity on 'master' has ceased*
- *No CVEs in 2020*
- *No open CVEs in 0.27-maintenance*
- *v0.27.4 on track to ship 2021-05-22*
- *Contributor count is growing*
- *Book completed*
- *Robin was 70 in January*

Applications using Exiv2

- *darktable*
- *libgexiv2-2*
- *libmyth*
- *viewnior*
- *pinot*
- *phototonic*
- *pdf2djvu*
- *nomacs*
- *luminance-hdr*
- *libqgis-analysis*
- *libkf5kexiv2*
- *libkf5filemetadata-bin*
- *libextractor3*
- *krita*
- *krename*
- *kphotoalbum*
- *hugin*
- *hugin-tools*
- *hdrmerge*
- *gwenview*
- *gthumb*
- *gpscorrelate-gui*
- *gpscorrelate*
- *gimp-lensfun*
- *gerbera*
- *geeqie*
- *ffdiaporama*
- *exiv2*
- *digikam-private-libs*
- *libexiv2-dev*

Overview open invention network

Key applications

- Apache
- Eclipse
- Evolution
- PostgreSQL
- Firefox
- Gimp
- Nautilus
- Digikam
- F-spot
- gphoto2
- Gnome
- KDE
- Thunderbird
- Python

Key members

- Canon
- Sony
- Google
- IBM
- Microsoft
- ...

Key definitions excerpt

- Linux Environment Component (LEC)
 - software packages whose released source code shall be identified on the OIN website, including bug fixes and error corrections
- Linux System
 - Linux Environment Component or any combination of such components which are generally available under an Open Source License or in the public domain and distributed with, or for use with, the Linux Kernel
- Open Source License
 - a license that conforms to the Open Source Definition (Version 1.9) as published by the non-profit organization Open Source Initiative (OSI).
- Predecessor Release
 - a previous release of such LEC the overall functionality of which is the same as or a subset of such LEC, but to which LEC may have added bug fixes, modifications for compatibility, performance enhancements
- Successor Release
 - a later release of such component that has the same overall functionality as such component and (a) is distributed by an open source maintainer of the component which maintainer is identified on the OIN website
 - contains modifications to existing functionality in terms of compatibility, performance enhancements, usability, localization, internationalization

Overview open invention network (OIN)

What's OIN?

- World's largest non-aggression community and free defensive patent pool
- Many of the global fortune 500 companies have joined as well as many start-ups, e.g. Canon
- OIN manages 1300 patents and applications, licensed free-of-charge to members
- OIN has more than 3300 open source Linux technology packages under their scope

Why should Exiv2 join OIN?

- Enables freedom of action through non-aggression, cross-license Linux System definition
- OIN preserves patent freedom for participants in key Open Source Software (OSS) projects
- Supports members and those under attack from patent aggressors
- Could mitigate future patent infringements issues for Exiv2

Overview open invention network (OIN)

Obligations & Benefits

- Entity is obliged to cross license its own patents that contain claims which read on core Linux / OSS functionality
- Entity does not assert these patents against other OIN members
- Patent peace in a community which owns 2.6+ million patents & applications in total
- Lifetime membership is FREE without entry barriers
- Everyone signs the same agreement terms
- Royalty-free license to OIN's patents
- Image processing patents in scope
 - <https://openinventionnetwork.com/directory-patents/categories/image-processing/>

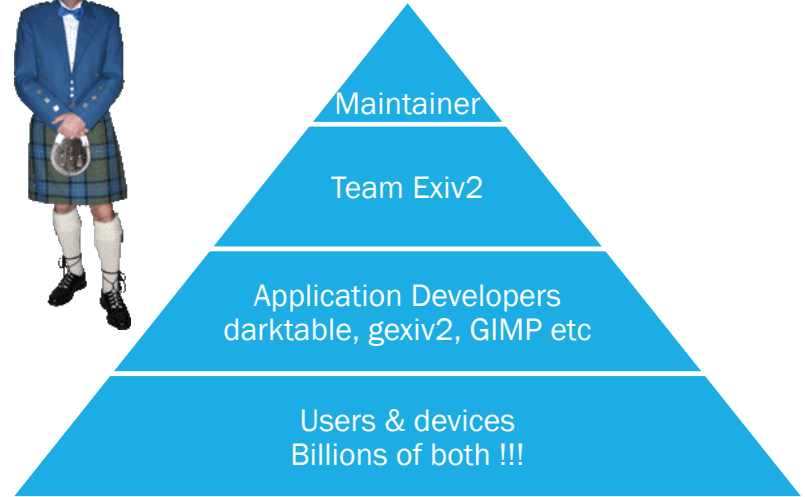
Open questions & disadvantages

- Additional effort to keep maintainer list up-to-date
- No hands-on experience

Future of Exiv2 after v0.27.4

Options

- Impossible: Robin becomes an immortal Highlander
- Best: New maintainer volunteers
- Poor: Hope for the best
- Worst: Announce that v0.27.4 is the final release of Exiv2
- Other: KDE or Apache adopts Exiv2
A tech giant maintains Exiv2



Team Exiv2 Meeting

- Fall 2021 (*C-19 permitting*)
- Location to be offered and discussed
- Purpose:
 - 1 Team Bonding
 - 2 Discuss the book
 - 3 Planning