

Legal Issues and Free Software Communities

The Case of Copyright and Patents in Debian

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20 May 2014
INRIA & IEEPI training
Paris, France

Outline

- 1 Legal fundamentals of Debian
- 2 Copyright
- 3 Patents
- 4 Further topics

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Debian at a glance

OS

1993 created by Ian A Murdock

- today
- web server market lead (31.2%, Jan 2014)¹
 - huge archive ($\approx 30'000$ pkgs), 12 architectures
 - base for half of the active Free Software distros²

Project

Social Contract (excerpt)

(1997)

- 1 100% Free Software
- 2 don't hide problems
- 3 works that do not meet our Free Software standards

$\approx 1'000$ members world-wide + $\approx 4-5'000$ contributors, volunteers

¹w3techs.com

²distrowatch.com

Fundamental #1 — DFSG

To verify the “100% Free” promise, you need to define “Free”.
The **Debian Free Software Guidelines** (DFSG) give such a definition.

http://www.debian.org/social_contract#guidelines

- require the **4 freedoms** to uphold
- + distribution specific provisions
- basis for the **Open Source Definition**
- **apply to all sorts of content**
 - ▶ firmware, documentation (PDFs!), artwork, music, ...



Fundamental #2 — Governance

Constitution

(1998)

Structures and rules of a Free Software-compatible democracy

on paper: pretty formal

- bodies: DPL, delegates, technical committee, secretary, ...
- procedures: NM process, general resolutions, ...

in practice: flat, bottom-up, almost anarchic

- teams (100x), maintainers (1'000x)
- all (almost entirely) autonomous in technical decisions

Fundamental #3 — Independence

no (or very little) **corporate control** over Debian

- no (single) company babysitting us
- living up on: donations, gift-economy
- truly remarkable among “major” distros

drawback: limited access to typical corporate resources

assets (money, hw, IP) held by **trusted organizations** world-wide

- e.g.: **SPI (US)**, FFIS (Germany), debian.ch, ...
- to reduce SPOF risk

Some consequences

At different scales, these traits apply to most “community-driven FOSS projects”.

Some consequences:

- top-down “*thou shalt not...*” doesn’t work
- limited access to legal advice
- some “US-centrism”

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Copyright

Main © concerns for a FOSS distro:

- keep Debian (main) 100% Free Software (mission)
- keep Debian archive legally (re-)distributable (legal)
- copyright assignment

how to do review of © notices in an almost anarchic setting?

Lesson learned

You don't.

Delegating review to individual maintainers doesn't work at this scale.

not all hackers are equally attentive (or even interested) when it comes to legal matters

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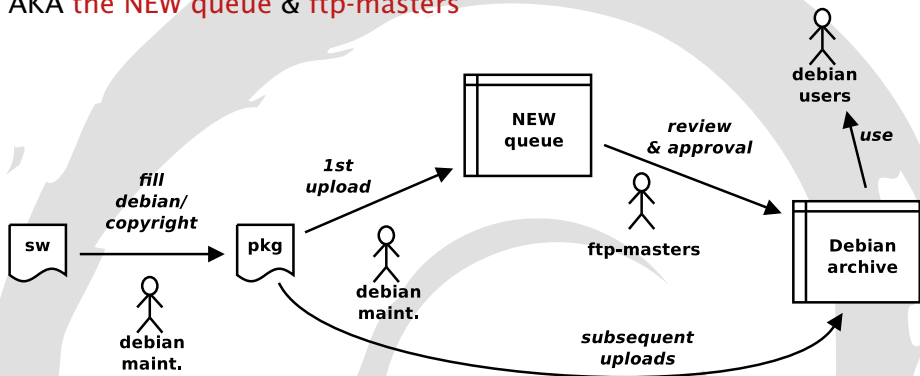
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when it comes to legal matters*

Package qualification

AKA the NEW queue & ftp-masters



- 2 tier review process
peer review—among “legal geeks”—might be a viable alternative
- main purpose: check **DFSG free-ness**

Quality assurance on debian/copyright

At Debian scale, (semi-)automated QA on license information is desirable, e.g.:

- do we link OpenSSL w/ GPL (unwillingly)?
- how many GPLv3-incompatible packages do we have? (2007)
- what happens when T1bbdb is relicensed to AGPL? (2013)
- ...

Idea

Heuristics to cross-check (Build-)Depends w/ licensing information → find candidates for further review.

Requirement: machine readable debian/copyright

Machine-readable debian/copyright

2007 early versions

2012 version 1.0

<http://www.debian.org/doc/packaging-manuals/copyright-format/1.0/>

Format: <http://www.debian.org/doc/packaging-manuals/copyright-format/1.0/>
Upstream-Name: X Solitaire
Source: <ftp://ftp.example.com/pub/games>

Files: *
Copyright: Copyright 1998 John Doe <jdoe@example.com>
License: GPL-2+

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; *[snip]*

On Debian systems, the full text of the GNU General Public License version 2 can be found in the file `‘/usr/share/common-licenses/GPL-2’`.

Files: complex-1/*
Copyright: Copyright 1998 Jane Smith <jsmith@example.net>
License: GPL-2+ with OpenSSL exception
[LICENSE TEXT]

Files: complex-2/*
Copyright: Copyright 1998 Jane Smith <jsmith@example.net>
License: GPL-2+ or Artistic-2.0, and BSD
[LICENSE TEXT]

Machine-readable debian/copyright — example

Example (Debian copyright file for LibreOffice 4.1.1)

Available at:

`sources.debian.net/src/libreoffice/1:4.1.4-2/debian/copyright`
`sources.debian.net/src/libreoffice/latest/debian/copyright` (current)

- real-life, large-ish example
- 77 license blocks, 30 of which are distinct
- 1427 lines
 - ▶ ≈ 200: globbing and copyright notices
 - ▶ ≈ 600: verbatim inclusion of unknown (to the ontology) licenses
 - ▶ ≈ 500: verbatim inclusion of known licenses, but not popular enough [in Debian] to be shipped under `/usr/share/common-licenses/` (e.g. CDDL, MPL)

Machine-readable debian/copyright (cont.)

Potential: [huge corpus of \(reviewed\) copyright/license notices](#) for popular Free Software.

Archive coverage:

date	release	source packages	archive coverage
Feb 2011	Squeeze	≈ 2'800	19%
May 2013	Wheezy	≈ 7'400	42%
Jan 2014	<i>unstable</i> ³	≈ 9'700	46%
May 2014	<i>unstable</i> ⁴	≈ 12'228	55%

³sid snapshot, 29/01/2014

⁴sid snapshot, 19/05/2014

Machine-readable debian/copyright vs SPDX

SPDX	(machine-readable) debian/copyright
for companies / BOMs extensional machine readable	for hackers intensional machine + human readable

- compatible short-license names
- prototype bidirectional converters available (via Config::Model)

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Patents

Like all large software assemblies, the Debian archive is a **patent minefield**. What isn't?

as everyone does, we did some risk assessment

Lessons learned:

- 1 hysteria, FUD has won
 - ▶ communities tend to avoid only the usual suspects
 - ▶ black-or-white approach to an inherently blurry matter
 - ▶ false sense of security

this has led to the debian-multimedia fork

- 2 “thou shalt not speak about...” doesn't work
 - ▶ recurrent public threads: *“patents spotted, remove \$pkg!”*

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Patents (cont.)

We need **training material** and **reusable policies** on patents.

- community (non-company) oriented
- not (only) US-specific

We discussed our needs with SFLC to produce some of it:

Community Distribution Patent Policy FAQ

<http://www.debian.org/reports/patent-faq>

Debian Position on Software Patents

<http://www.debian.org/legal/patent>

*[...] patent concerns expressed publicly may turn out to be unfounded but create a good deal of **fear, uncertainty, and doubt** in the meantime [...] **please refrain from posting patent concerns publicly or discussing patents outside of communication with legal counsel, where they are subject to attorney-client privilege.***

We need (a lot) more.

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Other community stories

only in Debian we have *also* had:

- trademark
 - ▶ see extended version of this talk
<https://lwn.net/Articles/546411/>
- US crypto exportation
- DMCA
- dealing with (US-)embargoed countries
- inbound trademark policy
 - ▶ trivia: *can recompilation invalidate nominative use?*
- trademark trolls
- copyright assignment (to non-profits, forthcoming)
- ...

Other, **different communities** have surely seen more.

Ask them to tell **their stories**.

Hackers need Free Software lawyers.

And vice-versa.

Wish list

- more **FOSS legal educational material** (not only ©)
- more community-oriented “**legal templates**”, wherever applicable
- more **fiscal sponsors** & SFLC-like organizations
 - ▶ high-quality *pro bono*, **legal advice for communities**
 - ▶ they should be **sustainable**
- less **laws that punish community practices**
 - ▶ mere knowledge, talking to your peers in public, ...
- less people (including lawyers) **spreading FUD**
 - ▶ as, unfortunately, **it works**
- less **US-centrism**

Laws, how we apply them, and how we communicate about them, all contribute to shape Free Software communities and their processes.


Thanks!

Questions?

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about the slides:

available at <https://gitorious.org/zacchiro/talks/trees/master/2014/20140520-inria-legal>
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