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Evolving the Signed-off-by tag

Evolving the Developer Certificate of Origin
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Disclaimer:

Thoughts here are our own, and
does not necessarily represent Qualcomm
or Qualcomm Atheros views.

Smoking Crack Organization

On May 23, 2004 Linus Torvalds wrote: [RFD] Explicitly documenting patch submission

"Some of you may have heard of this crazy company called SCO (aka "Smoking Crack Organization") who seem to have a hard time believing that open source works better than their five engineers do. They've apparently made a couple of outlandish claims about **where our source code comes from**, including claiming to own code that was clearly written by me over a decade ago."

Help document provenance of patches

"So, to avoid these kinds of issues ten years from now, I'm suggesting that we put in more of a process to explicitly document not only **where** a patch comes from (which we do actually already document pretty well in the changelogs), but **the path** it came through."

The originator and path

"Why the full path, and not just originator? "

In the chain we trust

- Originator posts patch
- Community provides review
- Originator posts v2 patch
- Community provides review
- Originator posts v60 patch
- Driver maintainer merges
- Driver maintainer send to **Subsystem maintainer**

Other maintainer sends to... Linus

The Developer Certificate or Origin

Originally posted as RFD, Request For Discussion, to the linux-kernel mailing list.

- As any good engineer, Linus put a version on it
- Titled, "Developer's Certificate of Origin 1.0" with three sections, (a), (b), (c).
- We already had documentation for submitting patches, so just amend it under:

  Documentation/SubmittingPatches
- Now: "Developer's Certificate of Origin 1.1" (d)

Summarizing the DCO

Summary of the DCO by Greg KH on the kernel-development slides:

(a) I created this change; or
(b) Based this on a previous work with
    a compatible license; or
(c) Provided to me by (a), (b), or (c)
    and not modified
(d) This contribution is public.

The Developer Certificate or Origin (a)

What the **Signed-off-by** tag means:

```
Developer's Certificate of Origin 1.1

By making a contribution to this project, I certify that:

(a) The contribution was created in whole or in part by me and I
    have the right to submit it under the open source license
    indicated in the file; or
```

Developer Certificate of Origin (b)

(b) The contribution is based upon previous work that, to the best of my knowledge, is covered under **an appropriate open source license** and I have the right under that license to submit that work with modifications, whether created in whole or in part by me, under the same open source license (unless I am permitted to submit under a different license), **as indicated in the file**; or

Developer Certificate or Origin (c)

(c) The contribution was **provided** directly to me by some other person who certified (a), (b) or (c) and I **have not** modified it.

Developer Certificate or Origin (d)

United Kingdom Data Protection Act

(d) I understand and agree that this project and the contribution are **public** and that a record of the contribution (including all personal information I submit with it, including my sign-off) is maintained **indefinitely** and may be redistributed consistent with this project or the open source license(s) involved.

Encourage other tag usage as well

```
commit 2965c1fd309e465fde6e75d81e22bc49e1d373d4
Author: Thomas Gleixner <tglx@linutronix.de>
Date:   Wed Mar 20 15:07:33 2013 +1100

    early_printk: consolidate random copies of identical code

    The early console implementations are the same all over the place.  Move
    the print function to kernel/printk and get rid of the copies.

    Signed-off-by: Thomas Gleixner <tglx@linutronix.de>
    Signed-off-by: Paul Gortmaker <paul.gortmaker@windriver.com>
    Cc: Russell King <linux@arm.linux.org.uk>
    Acked-by: Mike Frysinger <vapier@gentoo.org>
    Cc: Michal Simek <monstr@monstr.eu>
    Cc: Ralf Baechle <ralf@linux-mips.org>
    Cc: Benjamin Herrenschmidt <benh@kernel.crashing.org>
    Cc: Paul Mundt <lethal@linux-sh.org>
    Cc: "David S. Miller" <davem@davemloft.net>
    Cc: Chris Metcalf <cmetcalf@tilera.com>
    Cc: Richard Weinberger <richard@nod.at>
    Reviewed-by: Ingo Molnar <mingo@kernel.org>
    Tested-by: Paul Gortmaker <paul.gortmaker@windriver.com>
    Signed-off-by: Andrew Morton <akpm@linux-foundation.org>
```

Turns out other projects like it all

- Part of Gerrit code review documentation some of Gerrit's users:
  - Android
  - OpenStack
  - LibreOffice
  - QT
- Subsurface Linus' open source scuba divelog for Mac, Windows and Linux, refers to the above URL for contributions under README
- Take a pick at any project... you'd be surprised

Proposal to make it standalone

- Proposal to make it standalone
- Alan Cox noted best not to modify the Linux kernel DCO
- Fontana notes Diane Peters might have authored it
  - CC-BY-SA-2.5-generic
  - GPLv2
  - Fontana: DCO not copyrightable, Public Domain
- W. Trevor King decided to try to package it as a standalone git tree, under github signed-off-by, kept all historical changes, took in the full Documentation/SubmittingPatches, made it project agnostic
- Assumed GPLv2
- Allows workaround for non-GPLv2 projects, even proprietary to refer to it under origin/contributing

Why we are here

If we are going to make this a standalone legal document and have projects refer to it, how do we do it, for the different versions.

- I threw out idea of combining DCO like language for copyleft-next to help expand sections 4 and 7
- Linux Foundation should be involved
- Get legal clarity on DCO license
- Evolve DCO through dco-next as copyleft with copyleft-next
- Create a public mailing list
- Volunteer DCO maintainer(s)