Help the kernel team to help you

Ben Hutchings
<bennent@debian.org>

Mini-DebConf Hamburg
20th May 2018
The kernel team is busy

- The Linux kernel is big, and changes quickly
- We get a lot of bug reports, and a lot of feature requests
- We don't have time to handle all of them—sorry!
Report bugs upstream

If you run a recent kernel (stable-backports, testing, unstable, or experimental), upstream developers want your bug reports.

- Some kernel subsystems use a bug tracking system (usually bugzilla.kernel.org)
- Others only use their mailing list, and ignore Bugzilla
- MAINTAINERS file (in Debian linux-doc package) lists the mailing list (L:) and bug tracker (B:) for each subsystem
- Use the debbugs “forwarded” command to link the upstream bug report to a Debian bug report
Report bugs with the right information

- Our kernel packages include scripts for the `reportbug` command to gather diagnostic information
- We want to see this information with (almost) every bug report
- If the bug is in the currently running kernel, run: `reportbug kernel`
- Otherwise, report it against the ABI-versioned `linux-image` package, e.g. `reportbug linux-image-4.9.0-6-amd64`
  - *Not* a metapackage—the kernel is not in `linux-image-amd64`, nor is the bug
  - *Not* a firmware package—the iwlwifi driver is not in `firmware-iwlwifi`, nor is the bug
Add features upstream

We have some long-standing patches to the kernel, but we don't want to add more.

• New features should always be submitted upstream
• Read the docs first: www.kernel.org/doc/html/latest/process/
• We're happy to apply patches once they're accepted upstream—because we know they are only temporary
• Please help to get some of the long-standing patches upstream
Tell us what the fix is

Upstream bug fixes sometimes don't get into a release for months. You probably want them sooner than that.

If you know that there is a fix, give a specific reference:

- “Fixed by commit 46bb52162e7a” (best)
- “Fixed by the patch discussed at https://patchwork.kernel.org/patch/10412783/” (good)
- “Fixed by the patch discussed in the mailing list here” (not so good—patch may be mangled)
- “Fixed by the attached patch” (not so good—we have to work out whether we can trust it)
Talk to the team

I am not the only kernel maintainer in Debian, and I am usually not the only person who can help you. Don't send mail to me and no-one else.

- Bug reports go to the bug tracker
- Almost anything else can go to the mailing list (debian-kernel@lists.debian.org) or IRC (#debian-kernel)
- Security issues that are not yet public can be reported to me and to the security team (security@debian.org)
Merge requests welcome

- I can review, comment on, and apply a merge request in far less time than a patch sent to the bug tracker
- In the last 4 weeks that we used Alioth, we applied 1 patch to the linux package that wasn't from upstream or a team member
- In the last 4 weeks, we accepted 14 merge requests on Salsa
- Remember that feature patches still go upstream first
Credits & License

- Content by Ben Hutchings
  www.decadent.org.uk/ben/talks/
  License: GPL-2+

- Original OpenOffice.org template by Raphaël Hertzog
  raphaelhertzog.com/go/ooo-template
  License: GPL-2+

- Background based on “Serenity” theme by Edward Padilla
  wiki.debian.org/DebianArt/Themes/serenity
  License: GPL-2