



Giving back to the community: how does Debian perform?

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Contributing back to the community

- **Feedback**
 - **bug reports**
 - **wishlist bugs**
- **Source code**
 - **mostly patches**
 - **bugfixes**
 - **improvements**
 - **integration (with the distribution, with 3rd party software)**

Two ways to contribute

- **passively**
 - **interested people pick up what they want**
 - **can be difficult to find**
- **proactively**
 - **it's the expected way**
 - **a lot of work for maintainers**
 - **not always rewarded**

Debian source packages

- **Original tarball**
 - may have been modified (patented code, non-free material)
 - can be tarball-in-tarball or even worse
- **Differences**
 - direct file modifications
 - patch systems in the debian/ directory

Debian patch systems

- **usually**
debian/patches/<nameofpatch>
- **dpatch**
 - **debian/patches/00list**
- **quilt**
 - **debian/patches/series**
- **CDBS**
 - **simple-patchsys.mk or quilt or dpatch**
- **anything you want (even sed!)**

Find the patches

- **In Debian**
 - **the FTP archive**
 - **don't forget experimental**
- **Before they hit the archive**
 - **Alioth**
 - **watch VCS control headers if present**

Find the bugs

- **The Debian BTS**
 - has all bug reports
 - especially unresolved ones
 - patches that aren't yet applied
 - important discussions
- **Other interesting places**
 - the build daemon logs

Find Ubuntu patches

- **Differences with Debian**
 - the package format is the same
 - the package contents may vary heavily, sometimes even the packaging tools are changed
 - patches.ubuntu.com have the differences
- **Find upstream patches**
 - everything is centralised on Launchpad

Other distributions

- **Gentoo**
- **Fedora**
- **Mandriva**
- **many other interesting projects:
Arch Linux, CBLFS, PackMan, even
FreeBSD or fink (Mac OS X)**

What to do with these patches?

- **10 major distribution systems**
- **1,000s of packages (Debian: 18,000)**
- **2 to 10 atomic patches per package**

- **how to track a million patches?**
- **how much of the work is already duplicated?**

The problem with automated patch analysis

- **A patch does not carry much meaning**
 - **two very different patches can do the same thing, two very similar patches can do different things**
 - **patches can be merged, split, refactored, refreshed for new releases**
- **Human help is necessary**
 - **add comments to patches**
 - **but that cannot be machine-processed**

Patch sharing project

- **Centralised tool**
 - no such tool exists yet
- **The idea: do not duplicate work**
 - tagging system
- **Helpful to everyone**
 - other distributions
 - upstream authors
 - users

Ideas for later

- **Not only “patches” for the code:**
 - **.desktop files**
 - **icons**
 - **package descriptions and their translations**



Thanks!

- **Any questions?**