

Debian Quality Assurance

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Debian/Ubuntu : different cultures

- **Debian** : very strong emphasis on quality
 - "*We release when it's ready*"
 - Many DDs won't compromise on this
- **Packages owners** : individuals or teams
 - We can afford it
 - About 600 active developers
 - Many of them experts in their fields

Debian/Ubuntu : different cultures (2)

- **Release Critical (RC) bugs**
 - Prevent packages from being part of a release
 - Everybody is welcomed to fix them
 - Non-Maintainer Uploads
- **Infrastructure : no Launchpad**
 - Aggregation of different services
 - Different languages, different data formats
 - ⇒ Focus on interfaces between services

Debian QA team

- Goal : **Improve the quality of Debian as a whole**
- Not really a team (no membership), more a central place to discuss and work on QA stuff
- IRC : `#debian-qa@irc.debian.org` (OFTC)
- Mailing list : `debian-qa@lists.debian.org`

QA team : Tasks

- Maintain infrastructure
- Run archive-wide checks and mass bug filings
- Take care of the dirty areas of Debian

Maintain infrastructure

Package Tracking System (PTS)



Overview of **nmap** source package

Go:
Switch style: Default

| | | |
|--|---|---|
| General information | Todo | Bugs count |
| Latest version: 4.68-1 | Lintian reports 8 warnings about this package. You should make the package <i>lintian clean</i> getting rid of them. | All bugs (graph): 29 (32) |
| Maintainer: LaMont Jones | mentors.debian.net has version 4.76-1 of this package, you should consider sponsoring its upload. | RC bugs : 0 |
| Conforms to: 3.7.2.2 | The package should be updated to follow the last version of Debian Policy (Standards-Version 3.8.2 instead of 3.7.2.2). | I&N bugs : 13 (14) |
| Priority: extra | The BTS contains patches fixing 1 bug , consider including or untagging it. | M&W bugs : 12 |
| Section: net | | F&P bugs : 4 (6) |
| VCS : Git (browse) | | PTS subscription |
| Available versions (more...) | Latest news RSS | Subscribers count: 5 |
| Oldstable : 4.11-1 | [2009-02-16] nmap 4.68-1 MIGRATED to testing (Britney) | <input type="text" value="Subscribe"/> <input type="button" value="v"/> |
| Stable : 4.62-1 | [2008-08-01] Accepted 4.68-1 in unstable (low) (LaMont Jones) | <input type="text" value="your email"/> <input type="button" value="Send"/> |
| Testing : 4.68-1 | [2008-06-27] nmap 4.62-1 MIGRATED to testing (Britney) | Other links |
| Unstable: 4.68-1 | [2008-06-14] Accepted 4.62-1 in unstable (low) (LaMont Jones) | Changelog / Copyright |
| Source package | [2008-04-25] nmap 4.53-3 MIGRATED to testing (Britney) | Build: logs, more, exp, ports |
| Files .dsc .orig : .diff | [2008-04-04] Accepted 4.53-3 in unstable (low) (LaMont Jones) | Lintian report (0, 8) |
| Binary packages | | Popcon stats |
| nmap (27 bugs: 0, 12, 9, 6) | | Ubuntu ... |
| | | Version: 4.76-0ubuntu4 |
| | | Patch for version 4.76-0ubuntu4 |
| | | 13 open bugs |

Source package-centric view

<http://packages.qa.debian.org/package>

Developer Packages Overview (DDPO)

Packages overview for Lucas Nussbaum <lucas@lucas-nussbaum.net>

main (8)

| Source Name | Bugs | | | | | Version | | | | | Ubuntu | Excuses | Binary Package | Builddd | Debcheck | | | Popcon | Watch | | Section Priority |
|---|--|-------------------|--------------------|--|-------------------|-----------|---------|-------------|----------|--|---|---|---|---|--------------------|--------------------|---|--|---|-----|------------------|
| | All | RC | I&N | M&W | F&P | Oldstable | Stable | Testing | Unstable | Exp | | | | | St | Te | Un | | Unstable | Exp | |
| developers-reference* PTS Pool | 65 (67) | - | 15 | 50 (52) | - | 3.3.8 | 3.4.0 | 3.4.3 | | - | 3.4.3 - | - | 1 2 | - | - | - | - | 1036 More | - | - | doc optional |
| feed2imap* PTS Pool | 2 | - | - | 2 | - | 0.8-2 | 0.9.3-1 | 0.9.4-1 | | - | 0.9.4-1 - | - | 1 | - | - | - | - | 64 More | 0.9.4 | - | net optional |
| hpscc* PTS Pool | 1 | - | - | - | 1 | - | - | 1.3.1-1 | | - | - | - | 1 | Builddd More | - | Te | Un | 11 More | 1.3.1 | - | science extra |
| mpich2* PTS Pool | 3 | 2 | - | 1 | - | - | - | 1.2.1-rc1-1 | | - | 1.2-lubuntu1 1 bug | Excuses More | 1 2 3 4 | Builddd More | - | - | Un | 24 More | 1.2.1rc1 Details | - | devel extra |
| ruby-defaults* PTS Pool | 8 | - | 4 | 4 | - | 1.8.2-1 | 4.2 | | - | 4.2 1 bug | - | 1 2 3 4 5 6 7 ... 31 | - | St | Te | Un | 20902 More | - | - | - | ruby optional |
| ruby-taglib* PTS Pool | - | - | - | - | - | 1.1-2 | 1.1-7 | | - | 1.1-7 - | - | 1 2 | - | - | - | - | - | 96 More | 1.1 | - | ruby optional |
| taktuk* PTS Pool | - | - | - | - | - | 3.6.1-1 | 3.6.3-1 | | - | 3.6.3-1 - | - | 1 2 3 | Builddd More | - | - | - | - | 177 More | 3.7beta2 Details | - | net optional |
| websec* PTS Pool | 13 | - | 7 | 5 | 1 | 1.9.0-1 | 1.9.0-4 | | - | 1.9.0-4ubuntu1 3 bugs | - | 1 | - | - | - | - | - | 82 More | - | - | web optional |

Developer-centric view

<http://qa.debian.org/developer.php>

Ultimate Debian Database (UDD)

- Many different data sources and formats
- Idea : gather everything into a single SQL DB
- Combine that data
 - ⇒ Quality Assurance
 - ⇒ "Cool facts"

Debian Sources and Packages, bugs, popcon, testing migrations, upload history, orphaned packages, carnivore, lintian, debtags, translations, NEW queue, screenshots, DEHS, ldap, wanna-build, removals, **Ubuntu Sources and Packages, Ubuntu bugs, Ubuntu popcon**

`http://udd.debian.org/`
`http://wiki.debian.org/UDD`

Archive-wide checks and MBF

- **Archive rebuilds** : detect packages that FTBFS
 - Often finds toolchain bugs
 - Ran every 2-3 weeks, scripts to analyze failures
- **Piuparts** : package installation, upgrade and removal testing
 - Developers don't run it
 - Archive-wide setups at `http://piuparts.debian.org`
- **Lintian** package checker
 - Can be run locally by the developer
 - Laboratory mode at `http://lintian.debian.org`
 - Packages now rejected at upload time for some errors

Taking care of the dirty areas of Debian

- Packages without maintainers

- Already orphaned : do minimalistic maintainance
- Not yet orphaned : find them, orphan or remove them
 - Bapase (based on UDD) : scoring system to find neglected packages

- Inactive maintainers

- Missing In Action (MIA) team
- Find them, track them, orphan their packages
- Idea : *empower people who want to do the work*

Conclusion

Debian Quality Assurance :

- Mostly archive quality work
- Generally, we don't focus on specific packages
- No bug triaging, etc : left to maintainers
- Outside of archive-wide checks, not much bug filings
 - We rely on users to file bugs