

# Piuparts: Testing that .deb packages behave

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16th of August 2013

# Outline

- ▶ Introduction
- ▶ What piuparts(.d.o) is about
- ▶ Development status
- ▶ Future developments

# Who am I

- ▶ a Debian user since 1995
- ▶ a Debian volunteer since 2001
- ▶ root@piuparts.d.o since end of 2006
- ▶ a DD since 2007 :-)

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- ▶ How many of you have filed bugs against piuparts?

# Debian is defined by the Debian Policy Manual

## Abstract

This manual describes the policy requirements for the Debian distribution. This includes the structure and contents of the Debian archive and several design issues of the operating system, as well as technical requirements that each package must satisfy to be included in the distribution.

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  - ▶ 'lintian' also makes sure packages behave in respect to **Debian Policy** (but it "just" looks at the sources)

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  - ▶ packages which don't clean up after removal
  - ▶ **new**: *in-adequate* behaviour is also reported now!



## More news

- ▶ <http://packages.qa.debian.org/adequate> run by default, results visible on piuparts.d.o

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- ▶ Running on new virtual hardware on the Bytemark cluster
  - ▶ [pejacevic.debian.org](http://pejacevic.debian.org)
  - ▶ [piu-slave-bm-a.debian.org](http://piu-slave-bm-a.debian.org), 12 GB RAM, 4 cores
    - ▶ runs four piuparts slaves

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  - ▶ *those were the suites tested two years ago*
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- ▶ tests all packages in 'main' for 'experimental', 'sid2experimental', 'sid', 'sid-nodoc', 'testing2sid', 'jessie', 'wheezy2jessie', 'wheezy2bpo2jessie', 'wheezy2proposed', 'squeeze2wheezy-proposed', 'wheezy', 'squeeze2wheezy', 'squeeze2bpo-sloppy', 'squeeze2bpo2wheezy', 'squeeze' and 'lenny2squeeze'!
  
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  - ▶ 'wheezy-proposed' we currently *don't* test since we *do* test 'wheezy2proposed'.
  - ▶ up in its current form since 4.5 years

# The first million

"piuparts.debian.org now keeps just over a million logfiles: 275211 current logfiles and 729433 archived ones, which resulted in 1777 bugs being filed of which 281 are still open."

<http://lists.debian.org/<201305231117.43328.holger@layer-acht.org>>



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  - ▶ please don't forget important bugs neither :-D
- ▶ in total: 1411 RC bugs since 2009-02-28, thats 0.86 per day
  - ▶ *this* average **is** about RC bugs, in the end I wasn't that lazy after all :-)

# Jessie stats

- ▶ see <http://piuparts.debian.org/jessie/>

## Two very short HOWTOs

- ▶ `sudo piuparts some.deb`

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- ▶ `sudo piuparts some.deb`
- ▶ `sudo piuparts some.changes`

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- ▶ wait for piuparts.debian.org to test it!
- ▶ (this is really **not** the recommended way, but hey, I've been there, done that...)

# Team

- ▶ originally written by Lars Wirzenius
- ▶ now: Andreas, h01ger and Dave Steel
- ▶ since 2010: 8 committers in total
- ▶ tomorrow: you!
- ▶ send your ideas to <piuparts@lists.alioth.debian.org> or #debian-qa on irc.debian.org.

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## Two-minutes guide for new contributors

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- ▶ make your changes
- ▶ submit your feature branch or Git patchset on [bugs.debian.org](https://bugs.debian.org)



# Git branches

- ▶ 'master' for releases
- ▶ 'develop' for daily development
- ▶ 'bikeshed': in production on p.d.o, generally same as 'develop'



# "Roadmap"

- ▶ See `./TODO` in Git.
- ▶ *important* or higher bugs

# Wishlist bugs someone really should fix someday maybe

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- ▶ 'unittests.py' was last really edited before 2007
- ▶ test an archive with known good and known wrong packages, see how piuparts behaves

## Random improvements you care about (and I don't)

Patches you need to write if you want it (and sometimes, first convince us it's a good idea):

- ▶ extra tests for initscripts (#558819)
- ▶ cowbuilder support (#664727)
- ▶ LVM support (#559449)
- ▶ make piuparts run without root privs (#708663)

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- ▶ LVM support (#559449 has been *fixed* in 2009)
- ▶ make piuparts run without root privs (#708663)

## What are the needs of the Debian Community?

- ▶ piuparts testing before accepting into the archive, piuparts on the builddds?
- ▶ Or just prevention of testing migration...?
- ▶ Run piuparts on the whole archive, not only amd64
- ▶ Raise some errors priority (broken symlinks, to start with)

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- ▶ Raise some errors priority (broken symlinks, to start with)
- ▶ Add your needs here
- ▶ The long road to fully automated bug filing
  - ▶ ... to keep this QA effort alive and kicking
  - ▶ ... to make it possible to add more and more tests without increasing workload too much



## Questions / Thank you

- ▶ Thank you for your time and for being (or becoming) a good citizen of the free software world!
- ▶ Any questions?
- ▶ Send your ideas to <[piuparts@lists.alioth.debian.org](mailto:piuparts@lists.alioth.debian.org)> or #debian-qa on [irc.debian.org](http://irc.debian.org).
- ▶ (Or just ask me directly anytime!)

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# Obey!

Policy is your friend.  
Trust the Policy.  
Love the Policy.  
Obey the Policy.