piuparts.debian.org: systematic QA on 25000 packages

Holger Levsen
2010-06-11 Debian MinicConf @ LinuxTag 2010
piuparts.debian.org: systematic QA on 27799 packages

Holger Levsen
2010-06-11 Debian MinicConf @ LinuxTag 2010
piuparts.debian.org: systematic QA on 28886 packages

Holger Levesen
2010-06-11 Debian MinicConf @ LinuxTag 2010
Trust is good
control is better

The road to world domination is paved by policy

Holger Levsen
2010-06-11 Debian MinicConf @ LinuxTag 2010
Package
installation
upgrading
and
removal
test
suite
wer nutzt piuparts?
wer nutzt piuparts regelmäßig?
wer nutzt piuparts? regelmäßig?
piuparts.debian.org?
wer nutzt piuparts? regelmäßig?
piuparts.debian.org?
found a bug?
chroot = VirtualEnvironment()
try:
    chroot.install(package)
    chroot.remove(package)
    chroot.check()
except Exception:
    logging.error('FAIL')
else:
    logging.info('PASS')
sudo piuparts foo.deb
Debug: Starting command: ['dpkg', '--info', 'liwc_1.20-5_amd64.deb']

Debug: New debian package, version 2.0.
   Size 16566 bytes: control archive= 460 bytes.
               494 bytes,  13 lines      control

Package: liwc
Version: 1.20-5
Section: devel
Priority: optional
Architecture: amd64
Depends: libc6 (>= 2.5-0ubuntu1)
Installed-Size: 124
Maintainer: Ubuntu MOTU Developers <ubuntu-motu@lists.ubuntu.com>
Original-Maintainer: Antti-Juhani Kaijanaho <ajk@debian.org>
Description: Tools for manipulating C source code
   Includes programs for converting C++ comments to C comments,
      removing C comments, print out string literals, and converting
      characters to trigraphs and trigraphs to characters.

Debug: Command ok: ['dpkg', '--info', 'liwc_1.20-5_amd64.deb']
Debug: Created temporary directory /tmp/tmpsgAEyg
Debug: Setting up minimal chroot for jaunty at /tmp/tmpsgAEyg.

+ tens to hundreds kB more
1m7.0s INFO: PASS: All tests.
sudo piuparts -p foo.deb
1m7.3s ERROR: Broken symlinks:
sudo piuparts -p \
--no-symlinks foo.deb
http://piuparts.debian.org
debian Quality Assurance

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

General information
- Overview
- About
- FAQ
- Bugs / ToDo

piuparts.debian.org / piuparts.cs.helsinki.fi

piuparts is a tool for testing that .deb packages can be installed, upgraded, and removed without problems. The name, a variant of something suggested by Tollef Fog Heen, is short for "package installation, upgrading and removal testing suite".

It does this by creating a minimal
piatti.debian.org
fast AMD64 machine
donated from HP
hosted at Uni HEL
restricted machine access

up as it is since spring 2009
piuparts master/slave setup
piatti.debian.org
fast AMD64 machine
donated from HP
hosted at Uni HEL
restricted machine access

up as it is since spring 2009
piuparts master/slave setup

maintained by me only :-(
mostly piuparts-report.py
& some bash scripts

reports via mail
  (to h01ger + luk)
reports on the web
  by source
  by maintainer
PTS integration
BTS usertag

FAQ – use it!
## Debian Quality Assurance

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

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### Documentation

- [piuparts README](#)
- [piuparts manpage](#)
- [Debian policy](#)

### Available reports

- Bugs filed
- [sid](#)
- [squeeze](#)
- [by source package](#)

## py-upparts in sid

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<tr>
<th>Source</th>
<th>piuparts summary:</th>
<th>Version</th>
<th>py-upparts result:</th>
<th>Version</th>
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<tbody>
<tr>
<td>piuparts coverage</td>
<td></td>
<td></td>
<td>successfully-tested 2.80-2, 2.85-1</td>
<td></td>
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**Maintainer:** Lars Wirzenius <liw@iki.fi>

**Uploading:** Ben Finney <ben+debian@benfinney.id.au>

## piuparts in sid

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<tr>
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<tbody>
<tr>
<td>piuparts</td>
<td></td>
<td>0.35</td>
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**Maintainer:** piuparts developers team <piuparts-devel@lists.alioth.debian.org>

**Uploading:** Lars Wirzenius <liw@iki.fi>, Bill Alloombert <ballombe@debian.org>, Ian Jackson <iwj@debian.org>, John Wright <jsw@debian.org>, Ana Beatriz Guerrero Lopez <ana@debian.org>, Holger Levesen <holger@debian.org>
sid / squeeze / lenny2squeeze

~1000-3000 piuparts tests/day (with chroot tarballs...)

in sid:
~21700 successfully tested
~400 failures
~3700 failed dependencies
sid / squeeze / lenny2squeeze

~1000-3000 piuparts tests/day (with chroot tarballs...)

in squeeze:
~25074 successfully tested
~139 failures
~343 failed dependencies
Keeping it running is not much work.

Dealing with the results and the resulting discussions is.

PTS integration helps, but...
filing bugs and dealing with them is real work:

Status
45 Outstanding
5 Pending Upload
228 Resolved

Severity
3 Grave functionality bugs
197 Serious (policy violations or makes important bugs)
66 Important bugs
12 Normal bugs
file more bugs. 600 of them.
aid bug reporting

circular depends
easy approach: whitelist

alternative depends
detect more errors
multiarch

rewrite some bash in python

ease master/slave setup
even more
final words:
piuparts is an extremely nitpicky S.O.B. and really, really wants to find something wrong in your package.

Every time it does, liw giggles.

YOU DO NO WANT LIW TO GIGGLE!
piuparts is an extremely nitpicky S.O.B. and really, really wants to find something wrong in your package.

Every time it does, liw+h01ger giggle.

YOU DO NO WANT LIW TO GIGGLE!
YOU NEITHER WANT H01GER TO GIGGLE!