Trust is good
control is better

The road to world domination is paved by policy

Holger Levsen
Lars Wirzenius
2009-07-25 Debconf9
Package
installation
upgrading
and
removal
test
suite
chroot = VirtualEnvironment()
try:
    chroot.install(package)
    chroot.remove(package)
    chroot.check()
except Exception:
    logging.error('FAIL')
else:
    logging.info('PASS')
sudo piuparts foo.deb
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.

+ tens to hundreds kB more
1m7.0s INFO: PASS: All tests.
1m7.3s ERROR: Broken symlinks:
1m7.0s INFO: PASS: All tests.
sudo piuparts -p foo.deb
0m12.2s INFO: PASS: All tests.
sudo piuparts -p \  
--skip-minimize --no-symlinks
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

Documentation
- piuparts
- README

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
fast AMD64 machine
donated from HP
hosted at Uni HEL
up since spring 2009
master/slave setup

restricted machine access,
but QA members should IMO get it granted easily. And, most work can be done without..
mostly piuparts-report.py
& some bash script

reports via mail
  (to h01ger + luk)
reports on the web
  by source
  by maintainer

PTS integration
BTS usertag

FAQ – use it!
**Policy is your friend. Trust the Policy. Love the Policy. Obey the Policy.**

<table>
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<tr>
<th>General information</th>
<th>Overview</th>
<th>Unknown</th>
<th>Pass: 3</th>
<th>python-coverage piuparts enemies-of-carlotta</th>
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</thead>
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<table>
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<tr>
<th>Documentation</th>
<th>piuparts README</th>
<th>piuparts manpage</th>
<th>Debian policy</th>
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<table>
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<tr>
<th>Available reports</th>
<th>Bugs filed</th>
<th>sid</th>
<th>squeeze</th>
<th>by source package</th>
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<table>
<thead>
<tr>
<th>python-coverage in sid</th>
<th>Source: python-coverage</th>
<th>Maintainer: Lars Wirzenius <a href="mailto:liw@iki.fi">liw@iki.fi</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>Source: piuparts</td>
<td>Upuploaders: Ben Finney <a href="mailto:ben+debian@benfinney.id.au">ben+debian@benfinney.id.au</a></td>
<td></td>
</tr>
<tr>
<td>Version: 2.85-1</td>
<td>Binary: python-coverage</td>
<td>Successfully tested 2.80-2, 2.85-1</td>
</tr>
<tr>
<td></td>
<td>piuparts-result:</td>
<td>Version: 2.85-1</td>
</tr>
</tbody>
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<thead>
<tr>
<th>piuparts in sid</th>
<th>Source: piuparts</th>
<th>Maintainer: piuparts developers team <a href="mailto:piuparts-devel@lists.alioth.debian.org">piuparts-devel@lists.alioth.debian.org</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>Source:</td>
<td>Uploaders:</td>
<td></td>
</tr>
<tr>
<td>piuparts-summary:</td>
<td>Lars Wirzenius <a href="mailto:liw@iki.fi">liw@iki.fi</a>, Bill Allombert <a href="mailto:ballombe@debian.org">ballombe@debian.org</a>, Ian Jackson <a href="mailto:iwj@debian.org">iwj@debian.org</a>, John Wright <a href="mailto:jsw@debian.org">jsw@debian.org</a>, Ana Beatriz Guerrero Lopez <a href="mailto:ana@debian.org">ana@debian.org</a>, Holger Levesen <a href="mailto:holger@debian.org">holger@debian.org</a></td>
<td></td>
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</tbody>
</table>
sid
squeeze (=squeeze+s+lenny)

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

~17000 successfully tested
~300 failures
~3000 failed dependencies
~3000 circular dependencies
due to overwriting other packages
due to leaving processes running
due to owned files by many packages
due to files in /usr/local
due to owned files existing after purge
due to unowned files after purge
due to a 'command not found' error
unclassified failures
Important or serious?

It's still a year until squeeze freezes...
ToDo

file bugs. 300 of them.
circular depends
easy approach: whitelist
aid bug reporting
detect more errors
error classes
multiarch
rewrite some bash in python
ease master/slave setup
even more
Keeping it running is not much work.

Dealing with the results and the resulting discussions is.

PTS integration helps, but...
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!
http://piuparts.debian.org
debian-qa@lists.debian.org

piuparts BOF
Wednesday
2009-07-29 @ 13:00
Upper talkroom
(no giggling)
Thank you for using piuparts and improving Debian!