

# 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
```

```
0m0.0s DEBUG: Starting command: ['dpkg', '--info',  
'liwc_1.20-5_amd64.deb']
```

```
0m0.0s DUMP:
```

```
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.
```

```
0m0.0s DEBUG: Command ok: ['dpkg', '--info', 'liwc_1.20-5_amd64.deb']
```

```
0m0.0s DEBUG: Created temporary directory /tmp/tmpsgAEyg
```

```
0m0.0s DEBUG: Setting up minimal chroot for jaunty at /tmp/tmpsgAEyg.
```

+ 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

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[piuparts  
README](#)

### [piuparts.debian.org](http://piuparts.debian.org/) / [piuparts.cs.helsinki.fi](http://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 "**p**ackage **i**nstallation, **u**pgrading **a**nd **r**emoval **t**esting **s**uite".

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 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

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<b>General information</b>	<b>fail:</b> 0 <b>unknown:</b> 0 <b>pass:</b> 3 <a href="#">python-coverage</a> <a href="#">piuparts</a> <a href="#">enemies-of-carlotta</a>		
<a href="#">Overview</a>			
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<a href="#">piuparts README</a>			
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<b>Available reports</b>			
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<a href="#">squeeze by source package</a>			
<b>python-coverage in sid</b>			
<b>Source:</b>	<a href="#">python-coverage</a>	<b>piuparts summary:</b> 	<b>Version:</b> 2.85-1
<b>Maintainer:</b>	<a href="#">Lars Wirzenius &lt;liw@iki.fi&gt;</a>		
<b>Uploaders:</b>	<a href="#">Ben Finney &lt;ben+debian@benfinney.id.au&gt;</a>		
<b>Binary:</b>	<a href="#">python-coverage</a>	<b>piuparts-result:</b> <a href="#">successfully-tested 2.80-2, 2.85-1</a>	<b>Version:</b> 2.85-1
<b>piuparts in sid</b>			
<b>Source:</b>	<a href="#">piuparts</a>	<b>piuparts summary:</b> 	<b>Version:</b> 0.35
<b>Maintainer:</b>	<a href="#">piuparts developers team &lt;piuparts-devel@lists.alioth.debian.org&gt;</a>		
<b>Uploaders:</b>	<a href="#">Lars Wirzenius &lt;liw@iki.fi&gt;</a> , <a href="#">Bill Allombert &lt;ballombe@debian.org&gt;</a> , <a href="#">Ian Jackson &lt;iwj@debian.org&gt;</a> , <a href="#">John Wright &lt;jsw@debian.org&gt;</a> , <a href="#">Ana Beatriz Guerrero Lopez &lt;ana@debian.org&gt;</a> , <a href="#">Holger Levsen &lt;holger@debian.org&gt;</a>		



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 files owned by many packages  
due to files in /usr/local  
due to files existing after  
due to unowned files after purging  
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](mailto: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!