

Python in Debian: History, Present, and how to help

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Outline

- 1 Debian
- 2 Ubuntu
- 3 CPython in Debian
- 4 The people
- 5 Modern Debian Python Packaging

Debian

Headcount

Debian

Packages

Convenient installation

Free Software is written by disparate groups

Convenient installation

Build systems

Convenient installation

Dependencies

Coherent holistic product

FHS

Coherent holistic product

Transition handling

Debian

Maintainers

Maintainers

(Debian specific)

Maintainers

Package Maintainers \neq DD / DM

Debian is Feudal

but meritocratic

Maintainers

Experts in a particular package

Maintainers

Teams

Debian

Release schedule

Release schedule

every ~ 2 years, 3 support

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Ubuntu

Relationship to Debian

Relationship to Debian

Supported core

Relationship to Debian

70% entirely unmodified Debian

Relationship to Debian

Few new packages

Relationship to Debian

Smaller team

Release schedule

LTS: 2 year cycle, 5 year support

Release schedule

6 month releases

Release schedule

Paid archive maintenance

- Fast transitions
- Often slightly ahead of Debian

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CPython in Debian

Interpreter

History

Once upon a time, we had one Python in the archive

History

Since python2 (2.0) transitions required 1 python

History

Around 2.3, python-defaults

CPython in Debian

Applications

Applications

Useful to package

Applications

Can be kept out of the import path

CPython in Debian

Libraries

Libraries

for Applications

for Developers

crazy build systems

for Developers

C extensions

for Developers

convenience

Libraries

Only one version

CPython in Debian

History

~2.3, python-central

handles common python problems, like byte
compilation

~2.4, python-support

technical solution to a social problem

~2.4, python-support

automatic re-byte-compilation

~2.4, python-support

interesting upgrade failures

~2.5, py3k

mostly ignored

~3.2, dh_python2 & 3

PEP3147: `--pycache--`

~3.2, dh_python2 & 3

PEP3149: ABI tagging

~3.2, dh_python2 & 3

PEP384: stable ABI

~3.2, dh_python2 & 3

Ubuntu's py3k push

~3.3, pybuild, PyPy

One "true" way

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The people

DPMT & PAPT

Everything in SVN

Git migration always on the agenda

DPMT & PAPT

Knowledgeable people and sponsors

The people



Want to help?

Want to help?

`http://deb.li/joindpmt`

Want to help?

Fix bugs!

Want to help?

Review things

Want to help?

Build infrastructure

The people

Upstream maintainers

Upstream maintainers

Engage with your distro maintainers

Upstream maintainers

Join their team

Upstream maintainers

Subscribe to bugs

Upstream maintainers



Stable APIs

Upstream maintainers



Patience

The people

Inactive Distro maintainers

Inactive Distro maintainers

Help

Inactive Distro maintainers

Take over

Inactive Distro maintainers

Request removal

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Modern Debian Python Packaging

Fundamentals

Source Package

Upstream source + Patches

Source Package

RFC822-ish text files

Source Package

Except

- `debian/rules`: Make
- `debian/changelog`

Build systems

source -> binary*

Build systems

historical

- explicit (complex)

Build systems

dh

- Smart, Declarative
- Overrides

Modern Debian Python Packaging

pybuild

pybuild

setup.py

pybuild

all 3 python stacks

pybuild

nose, py.test, unittest

pybuild

dh plugin

examples

unicode

examples

python-cffi

Modern Debian Python Packaging

We're hiring

We're hiring

`http://deb.li/joindpmt`

Thanks!

Questions?

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Slides:
Available at
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