Why I am qualified to give this talk

- I will try hard not to be a troll
- Debian Developer since 2006
- Ubuntu Developer (MOTU) since 2006
- Involved in improving collaboration between both projects
  Developed/Initiated: Multidistrotools, ubuntu usertag on the BTS, improvements to the merge process, Ubuntu box on the PTS, Ubuntu column on DDPO, . . .
- Attended Debconf and UDS
- Friends in both communities
  - Would prefer not make enemies today
What’s in this talk

- Description of the Ubuntu development process
  - And how it relates to Debian
- Some truths and mythbusting about Ubuntu and Debian
- Discussion of the current state of affairs
The Ubuntu Development Process
Linux distributions 101

- Take software developed by upstream projects Linux, X.org, GNOME, KDE, …

- Put it all nicely together
  - Standardization / Integration
  - Quality Assurance
  - Support

- Get all the fame
Linux distributions 101

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- Get all the fame

Ubuntu has one special upstream: Debian
Ubuntu’s upstreams
Ubuntu Packages Workflow

Upstream projects

Debian

Patch

Ubuntu
Ultimate Debian Database

- Idea: gather all the data from the various Debian services into a single PostgreSQL database
- Many opportunities for data-mining

Currently imported in UDD:
Debian Sources and Packages, bugs, popcon, testing migrations, upload history, orphaned packages, carnivore, lintian, debtags, translations, NEW queue, screenshots, DEHS, ldap, wanna-build, removals, **Ubuntu Sources and Packages, Ubuntu bugs, Ubuntu popcon**

⇒ **Perfect tool to investigate Ubuntu and Debian**

- Let’s look at Ubuntu karmic
Ubuntu Karmic

Number of source packages, excluding Ubuntu-specific packages
^language-(support|pack)-.*, ^kde-l10n-.*, .*ubuntu.*, .*launchpad.*

<table>
<thead>
<tr>
<th></th>
<th>main</th>
<th>universe</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
<td>total</td>
<td>2131</td>
<td>12848</td>
<td>14979</td>
</tr>
<tr>
<td>not in Debian</td>
<td>148 (7%)</td>
<td>971 (7%)</td>
<td>1119 (7%)</td>
</tr>
<tr>
<td>changed</td>
<td>988 (46%)</td>
<td>1752 (14%)</td>
<td>2740 (18%)</td>
</tr>
<tr>
<td>newer upstream</td>
<td>260 (12%)</td>
<td>272 (2%)</td>
<td>532 (4%)</td>
</tr>
<tr>
<td>unchanged</td>
<td>995 (47%)</td>
<td>10125 (79%)</td>
<td>11120 (74%)</td>
</tr>
</tbody>
</table>

restricted ⇒ main, multiverse ⇒ universe
Ubuntu Packages Workflow

4% of the "patched" packages are newer upstream releases. They might be based on the Debian package or not.
Newer upstream releases (main)

Newer upstream releases (universe)


lucas@{debian.org,ubuntu.com}  Ubuntu and Debian
Still newer in Ubuntu Karmic

Compared to Squeeze today

Main:

Universe:

lucas@{debian.org,ubuntu.com}  Ubuntu and Debian
Bugs
Bugs

- Ubuntu users have the choice:
  - File bug upstream ⇒ might get flamed
  - File bug in Debian ⇒ very likely to get flamed
  - File bug in Launchpad ⇒ very likely to get ignored

Many users ⇒ many bug reports
Not enough Ubuntu developers for bug triaging and squashing
Lack of expertise for many packages
Bugs

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Why collaborate on bugs?

- Niche packages that rarely receive bugs reports in Debian
- More users of Ubuntu ⇒ more opportunities to run into bugs
- Slightly different environment in Ubuntu (newer toolchain, X) ⇒ we are likely to run into the same issues in Debian later
- Solving bugs = improving Free Software
  (That’s what really matters, no?)
Collaboration on bugs, today

- Some bugs get filed in Debian by Ubuntu developers
  - `origin-ubuntu` and `ubuntu-patch` usertags
  - 250-400 per Ubuntu release cycle
    - Mostly upstreaming of Ubuntu patches to reduce divergence
- Ubuntu box on the PTS, but:
  - Data imported using a fragile hack
    ```bash
    for b in $(ubuntu_open_bugs_list) ; do wget $text_version_of_the_bug ; done
    ⇒ 80’000 HTTP requests per day
    ```
  - Doesn’t include private bugs
Ubuntu box on the PTS

Overview of nmap source package

General information
Latest version: 4.68-1
Maintainer: LaMont Jones
Conforms to: 3.7.2.2
Priority: extra
Section: net
VCS: Git (browse)

Available versions (more...)
Oldstable: 4.11-1
Stable: 4.62-1
Testing: 4.68-1
Unstable: 4.68-1

Source package
Files .dsc .orig : .diff

Binary packages
nmap (27 bugs: 0, 12, 9, 6)

Todo
Lintian reports 8 warnings about this package. You should make the package lintian clean getting rid of them.

mentors.debian.net has version 4.76-1 of this package, you should consider sponsoring its upload.
The package should be updated to follow the last version of Debian Policy (Standards-Version 3.8.2 instead of 3.7.2.2).
The BTS contains patches fixing 1 bug, consider including or untagging it.

Latest news RSS
[2009-02-16] nmap 4.68-1 MIGRATED to testing (Britney)
[2008-08-01] Accepted 4.68-1 in unstable (low) (LaMont Jones)
[2008-06-27] nmap 4.62-1 MIGRATED to testing (Britney)
[2008-06-14] Accepted 4.62-1 in unstable (low) (LaMont Jones)
[2008-04-25] nmap 4.53-3 MIGRATED to testing (Britney)
[2008-04-04] Accepted 4.53-3 in unstable (low) (LaMont Jones)

Bugs count
All bugs (graph): 29 (32)
RC bugs: 0
I&N bugs: 13 (14)
M&W bugs: 12
F&P bugs: 4 (6)

PTS subscription
Subscribers count: 5
Subscribe
your email
Send

Other links
Changelog / Copyright
Build: logs, more, exp, ports
Lintian report (0, 8)
Popcon stats

Ubuntu ...
Version: 4.76-0ubuntu4
Patch for version 4.76-0ubuntu4
13 open bugs
State of the Debian - Ubuntu relationship

Disclaimer:
Based on my perception
(which I hope is quite fair)
Feelings on the Debian side

- Historically: many DDs unhappy about Ubuntu
  - Feeling of being stolen
  - Public claims of "giving back", difficult to back with reality
  - Problems with some Canonical employees tend to reflect on Ubuntu as a whole

- Things have improved considerably
- Most DDs see some good points in Ubuntu
- Brings a lot of new Linux users (and Debian derivative users!)
- Provides something that just works for their friends/parents
- Brings new developers to Debian
- Serves as a technological playground
  - dash as /bin/sh, upstart, debug packages, hardening GCC flags, etc.
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Feelings on the Ubuntu side

- Culture: contributing to Debian is The Right Thing to do
- Many Ubuntu developers contribute to Debian

However:
- Often not a lot to contribute back (on the package level)
  - Many bugfixes are just workarounds
- Canonical is a company
  - Contributes back when it benefits them
  - Don’t expect many free "gifts" to Debian
Since 2004, Debian has:
- lost relevance, by losing a large number of users
- gained relevance, by becoming the basis of a major distro

Improving collaboration between Debian and Ubuntu: benefits both (and the Free Software ecosystem as a whole)
Challenges and open questions

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- Will Debian be more than a package supermarket?
- Problem in Ubuntu: quality of "uncared-for" packages
  - How will Ubuntu overcome that?
More technical discussions between Ubuntu and Debian
Some productive discussions on debian-devel@ recently. There could be more.

Easier access to data from Launchpad
Direct access to the PostgreSQL DB?

Personal Packages Archives for Debian