Quality Assurance in Lenny+1

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Quality Assurance

<pusling> QA is just about
maintaining packages no one else wants

Quality Assurance

- Goal: **Improve the quality of Debian as a whole**
- Not really a team, more a central place to discuss and work on QA stuff
- `#debian-qa`, `debian-qa@lists.d.o`

What do "we" do?

- Maintain the PTS, DDPO (Debian Developers' Packages Overview), and many other tools
    - Don't write your own tools for your team!
    - Write them for Debian, get them used by everybody!
- Develop tools to run archive-wide checks (and do the checks and mass bug filings)
- Take care of orphaned/neglected packages
- Track inactive maintainers (Missing In Action team)

(NEW) Bapase : BAd PAckages SEarch

- Use various sources of info about packages
- And a scoring system
- To get a list of suspicious packages, and orphan/remove them

Examples: Packages which are very buggy, neglected/useless, orphaned, etc.

	Package	Score	Action	O age	Testing	Migrate	Popcon	Wnpp	RC	Bugs	Last upload	NMUs	Comments
1	ivtools	124269	**Should be removed (since 2008-07-11)**	2122 (2002-10-15)	270	270	180	RFA	0	9	91 (2008-05-07) (Maint: 2005-08-24)	4	maintainer and possible adopter pinged, and removal proposed to maintainer
2	metamail	114643	**Should be removed (O pkg) (since 2008-01-28)**	1404 (2004-10-01)	0	0	3263	O	0	12	151 (2008-03-08)		still has revdeps. prop_rm filed on rdep.
3	electric	112643	**Should be removed (O pkg) (since 2008-01-30)**	1238 (2005-03-17)	0	0	415	O	0	2	202 (2008-01-17)		
4	epplets	104381	**Should be removed (since 2008-03-26)**	132 (2008-03-27)	270	270	475	O	2	8	940 (2006-01-09) (Maint: 2005-03-30)	2	
5	subcommander	103864	**Should be orphaned (since 2008-05-22)**	21 (2008-07-16)	270	270	329	O	3	5	123 (2008-04-05) (Maint: 2006-11-20)	1	
6	libgstreamer-perl	103699	**Should be orphaned (since 2008-02-06)**	105 (2008-04-23)	0	0	47	ITA	0	3	92 (2008-05-06)		

(NEW) Ultimate Debian Database

GSOC project by Christian von Essen
Co-mentored with zack & HE

Gather a lot of existing data on Debian in the same SQL DB

=> SQL queries combining different data sources:

- RC bugs sorted by popcon of the package they affect
- (co-)maintainers with the most bugs
- ...

(NEW) Ultimate Debian Database (2)

Current status:

- data sources imported on a regular basis (cron or ssh-triggered).
- Packages/Sources (for Debian and Ubuntu), popularity contest (for Debian and Ubuntu), testing migrations, history of uploads, bugs, orphaned packages, lintian, carnivore, ...
- Runs on udd.debian.net, accessible from master
  `psql -U guest -h udd.debian.net udd`

    http://wiki.debian.org/UDD

Popular packages not in testing

```
SELECT DISTINCT unstable.source, insts
FROM (SELECT DISTINCT source FROM sources
WHERE distribution = 'debian' and release = 'sid')
AS unstable, popcon_src
WHERE unstable.source NOT IN
  (SELECT source FROM sources
   WHERE distribution = 'debian'
   AND release = 'lenny')
AND popcon_src.source = unstable.source
ORDER BY insts DESC;
```

Popular packages not in testing

```
lzo 64910
gnome-cups-manager 32241
db4.6 20780
ffmpeg-debian 13045
freetype1 10544
flashplugin-nonfree 7110
perlftlib 6752
nvidia-graphics-drivers 3855
wxwindows2.4 3643
dvi2tty 2252
kdebase-runtime 1760
easytag 1714
g-wrap 1586
yaird 1503
slocate 1501
youtube-dl 1401
```

Most popular orphaned packages

```
select pkgs.source, type, insts
from orphaned_packages pkgs, popcon_src pc
where pkgs.source = pc.source
and pkgs.type in ('O', 'ITA')
ORDER BY pc.insts DESC
```

Most popular orphaned packages

```
         source             | type | insts
----------------------------+------+-------
 net-tools                  | ITA  | 73981
 ispell                     | ITA  | 65844
 vbetool                    | ITA  | 33978
 mdbtools                   | ITA  | 30376
 libdc1394                  | ITA  | 21908
 imlib                      | O    | 21308
 toshset                    | O    |  9271
 gnome-libs                 | O    |  8458
 reiserfsprogs              | ITA  |  8270
 htdig                      | O    |  7637
 libnet                     | ITA  |  7185
 xli                        | O    |  6914
 pyogg                      | O    |  4595
 pyvorbis                   | O    |  4502
 procinfo                   | ITA  |  3843
 gnuift                     | O    |  3698
```

Maintainers with the most lintian errors

(using carnivore!)

```
SELECT (SELECT cn.name || ' <' || ce.email || '>'
FROM carnivore_names cn, carnivore_emails ce
WHERE ce.id = cn.id AND ce.id = (SELECT id
FROM carnivore_emails WHERE (temp.package_type IS NULL
AND email = (SELECT substring(p.maintainer from '.+ <(.+)>')
FROM packages p WHERE p.package = temp.package
AND p.distribution = 'debian' AND p.release = 'sid'
LIMIT 1)) OR (temp.package_type = 'source'
AND email = (SELECT substring(s.maintainer from '.+ <(.+)>')
FROM sources s WHERE s.source = temp.package
AND s.distribution = 'debian' AND s.release = 'sid'
LIMIT 1)) LIMIT 1) LIMIT 1) AS person,
SUM(temp.tag_count) AS tag_count
FROM (SELECT l.package AS package, l.package_type AS package_type,
COUNT(l.tag) AS tag_count
FROM lintian l WHERE (l.tag_type = 'error' OR l.tag_type = 'warning')
AND (l.package_type IS NULL OR l.package_type = 'source')
GROUP BY l.package, l.package_type) AS temp
GROUP BY person ORDER BY tag_count DESC;
```

Maintainers with the most lintian errors

```
4515 Debian Qt/KDE Maintainers <debian-qt-kde@lists.debian.org>
2782 Debian OpenOffice Team <debian-openoffice@lists.debian.org>
1556 Debian QA Group <packages@qa.debian.org>
1104 Stefan Hornburg <racke@debian.org>
1098 Isaac Clerencia <isaac@debian.org>
870 Debian GCC Maintainers <debian-gcc@lists.debian.org>
835 Debian GIS Project <pkg-grass-devel@lists.alioth.debian.org>
788 GNU Libc Maintainers <debian-glibc@lists.debian.org>
643 Michael Stone <mstone@cs.loyola.edu>
630 Debian X Strike Force <debian-x@lists.debian.org>
630 Jose Luis Rivas <ghostbar38@gmail.com>
621 Debian Java Maintainers <pkg-java-maintainers@lists.alioth.debian.
597 Mutsumi <ishikawa@isoternet.org>
581 Gurkan Sengun <gurkan@phys.ethz.ch>
571 Muammar El Khatib <muammarelkhatib@gmail.com>
541 NIIBE Yutaka <gniibe@debian.org>
532 Turbo Fredriksson <turbo@papadoc.bayour.com>
529 Ari Pollak <compwiz@bigfoot.com>
524 LI Daobing <lidaobing@gmail.com>
520 Javier Fernandez-Sanguino Pen~a <jfs@ieeesb.etsit.upm.es>
```

So, what can you do?

- Talk to us!
  Join `#debian-qa`, `debian-qa@lists.d.o`
- Adopt orphaned packages you care about.
  `wnpp-alert` (in `devscripts`) is your friend.
- Improve our tools (see bugs filed against
  `qa.debian.org`)
- Think about mass bug filings about real issues, and talk to us!

But this is supposed to be a BOF!

(Ideas of) things to discuss:

- \>700 orphaned packages! Is that OK?
  - Should we aggressively remove them?
  - Ignore them?
  - Split Debian into a main (supported) and an universe (unsupported) section?
- Status of MIA (Missing In Action, tracking of inactive maintainers)
- How could we make the QA team more attractive?
- Ideas of new checks/tests/MBF/stuff to do for lenny+1?
  - Anyone interested in working on piuparts?