Debian Quality Assurance

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Debian/Ubuntu: different cultures

- Debian : very strong emphasis on quality
 - "We release when it's ready"
 - Many DDs won't compromise on this
- Packages owners: individuals or teams
 - We can afford it
 - About 600 active developers
 - Many of them experts in their fields

Debian/Ubuntu : different cultures (2)

- Release Critical (RC) bugs
 - Prevent packages from being part of a release
 - Everybody is welcomed to fix them
 - Non-Maintainer Uploads
- Infrastructure : no Launchpad
 - Aggregation of different services
 - Different languages, different data formats
 - ⇒ Focus on interfaces between services

Debian QA team

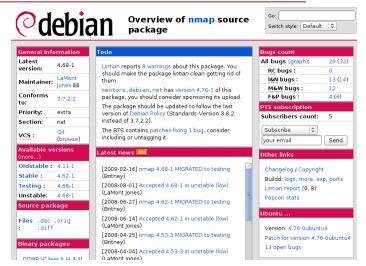
- Goal : Improve the quality of Debian as a whole
- Not really a team (no membership), more a central place to discuss and work on QA stuff
- IRC: #debian-qa@irc.debian.org (OFTC)
- Mailing list: debian-qa@lists.debian.org

QA team : Tasks

- Maintain infrastructure
- Run archive-wide checks and mass bug filings
- Take care of the dirty areas of Debian

Maintain infrastructure

Package Tracking System (PTS)



Source package-centric view

http://packages.qa.debian.org/package

Developer Packages Overview (DDPO)

Packages overview for Lucas Nussbaum < lucas@lucas-nussbaum.net>

main (8)

Source Name	Bugs					Version					Ubuntu	Excuses	Binary	Buildd	Debcheck		Popcon	Watch		Section	
	All	RC	I&N	M&W	F&P	Oldstable	Stable	Testing	Unstable	Exp	Obuntu	Excuses	Package	Bullaa	St	Te	Un	Popcon	Unstable	Exp	Priority
developers- reference* PTS Pool	65 (67)	-	<u>15</u>	<u>50</u> (<u>52</u>)	-	3.3.8	3.4.0	:	3.4.3	-	3.4.3	-	12	-	-		-	1036 More	-	-	doc optional
feed2imap* PTS Pool	2		-	2		0.8-2	0.9.3-1	0	9.4-1	-	0.9.4-1		1				-	64 More	0.9.4	-	net optional
hpcc* PTS Pool	1	-	-	-	1		1.3.		3.1-1	-	-	-	1	Buildd More	-	Te	<u>Un</u>	11 More	1.3.1	-	science extra
mpich2* PTS Pool	3	2	-	1	-		- 1.2.1~rc1-1		-	1.2-1ubuntul 1 bug	Excuses More	1234	Buildd More	-	-	<u>Un</u>	24 More	1.2.1rc1 Details	-	devel extra	
ruby-defaults* PTS Pool	8	-	4	4	-	1.8.2-1	4.2		-	4.2 1 bug	-	1234567 31	-	<u>St</u>	<u>Te</u>	<u>Un</u>	20902 <u>More</u>	-	-	ruby optional	
ruby-taglib* PTS Pool	-	-	-	-	-	1.1-2	1.1-7		-	1.1-7	-	12	-	-		-	96 More	1.1	-	ruby optional	
taktuk* PTS Pool	-		-	-			3.6.1-1	3.6.3-1		-	3.6.3-1		123	Buildd More				177 More	3.7beta2 Details	-	net optional
websec PTS Pool	13	-	Z	5	1	1.9.0-1	1.9.0-4		-	1.9.0-4ubuntu1 3 bugs	-	1	-			-	82 More	-	-	web optional	

Developer-centric view

http://qa.debian.org/developer.php

Ultimate Debian Database (UDD)

- Many different data sources and formats
- Idea : gather everything into a single SQL DB
- Combine that data
 - ⇒ Quality Assurance
 - ⇒ "Cool facts"

Debian Sources and Packages, bugs, popcon, testing migrations, upload history, orphaned packages, carnivore, lintian, debtags, translations, NEW queue, screenshots, DEHS, Idap, wanna-build, removals, **Ubuntu Sources and Packages, Ubuntu bugs, Ubuntu popcon**

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http://udd.debian.org/
http://wiki.debian.org/UDD
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Archive-wide checks and MBF

- Archive rebuilds: detect packages that FTBFS
 - Often finds toolchain bugs
 - Ran every 2-3 weeks, scripts to analyze failures
- Piuparts: package installation, upgrade and removal testing
 - Developers don't run it
 - Archive-wide setups at http://piuparts.debian.org
- Lintian package checker
 - Can be run locally by the developer
 - Laboratory mode at http://lintian.debian.org
 - Packages now rejected at upload time for some errors

Taking care of the dirty areas of Debian

- Packages without maintainers
 - Already orphaned : do minimalistic maintainance
 - Not yet orphaned : find them, orphan or remove them
 - Bapase (based on UDD): scoring system to find neglected packages
- Inactive maintainers
 - Missing In Action (MIA) team
 - Find them, track them, orphan their packages
 - Idea : empower people who want to do the work

Conclusion

Debian Quality Assurance:

- Mosty archive quality work
- Generally, we don't focus on specific packages
- No bug triaging, etc: left to maintainers
- Outside of archive-wide checks, not much bug filings
 - We rely on users to file bugs