Package Tracking System
Hacking's guide

By Raphaël Hertzog <hertzog@debian.org>

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Debian-QA mini-conference
Plan

- Introduction
- Where to get the sources
- Directory overview
- The mail part
- The web part
- What's left? What you can do ...
The Package Tracking System lets you follow everything related to the life of a package. It's of interest for co-maintainers, advanced users, QA members, ...

With the mail interface you can subscribe to “packages” and receive in real-time the same information than the maintainer (bugs, upload notification, cvs/svn commits, ...).

The web interface displays the actual status of the package and some historical information. Example: http://packages.qa.debian.org/dpkg
Some figures

- Almost 4 years old
- 3300 source packages with subscribers
- 6300 subscriptions (with 3000 unique emails)
- Several hundreds of megabytes of HTML pages
The sources

- The sources are hosted on cvs.debian.org

```
export CVSROOT=:pserver:anonymous@cvs.debian.org/cvs/qa
cvs login
cvs co pts
```

- Web interface: 
  ```
  http://cvs.debian.org/pts/?cvsroot=qa
  ```

- Live on 
  ```
  master.debian.org:/org/packages.qa.debian.org/
  ```
Directory overview

- /bin: Perl scripts for the mail interface
  - /control.pl: 360 lines to handle pts@qa.debian.org
  - /dispatch.pl: 200 lines to handle *@packages.qa.debian.org
- /etc: Configuration (a template for the confirmation mail)
- /perl: Common code (350 more lines)
- /mail: Exim configuration for p.q.d.o
- /www: Web interface
Mail interface

- Two berkeley databases are used to store the subscriptions (/db/subscriptions.db and /db/tags.db)

- **Script dispatch.pl**
  - Receives mails from several sources (BTS, katie, users, ...), identifies them (“keyword/tag”), associates them to a source package and forwards them to the subscribers

- **Script control.pl**
  - Identify commands within the mail and execute them
  - Handle separate confirmation mails (stores “secret” hashes in /spool)

- **Script dump.pl, dump-tags.pl, count.pl.**
  - Display a textual version of the database and some statistics
Nice features of the mail interface

- Mails sent to the PTS are classified so that one can subscribe only to the information that is of interest for him.
- The user can filter everything with the help of the X-PTS-Package and X-PTS-Keyword header.
- We can always send more info to the PTS by introducing new “keywords/tags”
What's lacking?

- **VERP Bounce handling**
  - *owner@p.q.d.o* (me) is receiving all the bounces and they are either not treated, or treated manually (which is time consuming)

- **An automatic (monthly or quarterly) mail giving a summary of the state of the package**
  - Number of bugs opened/closed since last summary
  - List of actual problems
  - ...
# Overview of libdbd-pg-perl source package

## General Information

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Last version</td>
<td>1.42-2</td>
</tr>
<tr>
<td>Maintainer</td>
<td>Raphael Hertzog [mail]</td>
</tr>
<tr>
<td>Co-Maintainers</td>
<td>Ivan Kohler [mail]</td>
</tr>
<tr>
<td>Standards-Version</td>
<td>3.6.2</td>
</tr>
<tr>
<td>Priority &amp; Section</td>
<td>optional - perl</td>
</tr>
</tbody>
</table>

## Bugs Count

- **All bugs**: 1
- **Release Critical**: 0
- **Important and Normal**: 1
- **Minor and Wishlist**: 0
- **Fixed and Pending**: 0

## Subscription - Package Tracking System

- **Subscribers count**: 1

## Binary Package(s)

- `libdbd-pg-perl` (1 bugs 0 0 0 0)

## Available versions

- **Oldstable**: 1.01-3
- **Stable**: 1.41-3
- **Stable Proposed Updates**: 1.42-0sarge1
- **Testing**: 1.42-1
- **Unstable**: 1.42-2

## Other links

- Changelog
- Build logs
- Lintian report
- Popcon stats

## Testing Status

- **Too young, only 3 of 10 days old**
- **out of date on hppa: libdbd-pg-perl (from 1.42-1)**
- **Not considered**
- **Depends: libdbd-pg-perl postgresql-8.0 (not considered)**

## Latest News

- [2005-06-22] Accepted 1.42-0sarge1 in stable (low) (Raphael Hertzog)
- [2005-06-22] Accepted 1.42-2 in unstable (low) (Raphael Hertzog)
- [2005-05-25] Accepted 1.42-1 in unstable (low) (Raphael Hertzog)
- [2005-05-04] Accepted 1.41-3 in unstable (medium) (Raphael Hertzog)
- [2005-05-04] Accepted 1.41-2 in unstable (medium) (Raphael Hertzog)
- [2005-04-15] Accepted 1.41-1 in unstable (low) (Raphael Hertzog)
- [2004-06-27] Accepted 1.32-2 in unstable (low) (Raphael Hertzog)
- [2004-03-10] Accepted 1.32-1 in unstable (low) (Ivan Kohler)
- [2003-12-09] Accepted 1.31-2 in unstable (low) (Raphael Hertzog)
- [2003-12-08] Accepted 1.31-1 in unstable (low) (Raphael Hertzog)
- [2003-09-06] Accepted 1.22-3 in unstable (low) (Raphael Hertzog)
- [2003-07-12] Accepted 1.22-2 in unstable (low) (Raphael Hertzog)
- [2003-04-08] Accepted 1.22-1 in unstable (low) (Raphael Hertzog)
- [2003-01-01] Accepted 1.20-2 in unstable (low) (Raphael Hertzog)
- [2002-12-12] Accepted 1.20-1 in unstable (low) (Raphael Hertzog)
- [2002-08-26] Accepted 1.13-4 in unstable (low) (Raphael Hertzog)
- [2002-08-24] Accepted 1.13-3 in unstable (low) (Raphael Hertzog)
- [2002-05-16] Accepted 1.13-1 in unstable (low) (Raphael Hertzog)
- [2002-04-11] Accepted 1.01-3 in unstable (medium) (Raphael Hertzog)
- [2002-03-02] Accepted 1.01-2 in unstable (low) (Raphael Hertzog)
- [2001-07-08] Accepted 1.01-1 in unstable (medium) (Raphael Hertzog)
- [2001-05-20] Accepted 0.98-2 in unstable (medium) (Raphael Hertzog)
- [2001-05-06] Accepted 0.98-1 in unstable (medium) (Raphael Hertzog)
- [2001-04-22] Accepted 0.97-1 in unstable (medium) (Raphael Hertzog)
- [2001-04-21] Accepted 0.95-5 in unstable (medium) (Raphael Hertzog)
- [2001-03-06] Accepted 0.95-4 in unstable (medium) (Raphael Hertzog)
- [2001-02-22] Accepted 0.95-3 in unstable (medium) (Raphael Hertzog)
- [2000-11-16] Accepted 0.95-2 in unstable (low) (Raphael Hertzog)
- [2000-10-12] Accepted 0.95-1 in unstable (low) (Raphael Hertzog)
- [2000-09-13] Accepted 0.95-0 in unstable (low) (Raphael Hertzog)
- [2000-08-17] Accepted 0.93-1 in unstable (low) (Raphael Hertzog)
- [2000-07-08] Accepted 0.93-2 in unstable (low) (Raphael Hertzog)
Directory overview (/www)

- /bin: Python scripts (1400 lines in a dozen files)
- /incoming: Raw data after download
- /base: Reference data generated by the scripts (mostly XML and emails)
- /xsl/pts.xsl: XSLT stylesheet
- /web: Generated HTML files
- /cgi-bin: 404 handling for redirection, online subscription form
- /etc: mhonarc config file (for html conversion of emails)
Architecture

Everything launched 3 times/day by bin/do_all.sh
Nice features of the web interface

- You can put your own content on the web page in the “Latest news” section or in a “Static news” section.
  - Put a link to the upstream web site
  - Indicate where the CVS/SVN is
- This is done by sending a mail to pts-news@qa.debian.org or pts-static-news@qa.debian.org
- Check the developers reference for details!
Ideas for the future

- The PTS is meant to be a real TODO list for the packages maintainers
- Any “know problem” or any “possible amelioration” should be listed:
  - lack of debtags information
  - other examples, recently added:
    - availability of Ubuntu patches
    - availability of patches in the BTS
Conclusion - Questions

- The PTS has become in 4 years an important part of Debian's infrastructure.
- It's not a very complex software but very few people looked at it.
- We need to have more people who are able to maintain it.
  - spread the knowledge
  - add some (human) redundancy
  - share the workload
  - implement new ideas