About finding the right packages with debtags?

Debtags and what you can do with it today.

May 5, 2006 14 slides Enrico Zini (enrico@debian.org)

This presentation



I would like to tell you the story of Shiyali Ramamrita Ranganathan and library science.

It's a beautiful story.

But "Ranganathan" is more than 7+/-2 letters, so people get confused.

So I'll go technical.

Ask me later of Ranganathan at the pub.

The idea

```
Package: gedit
Section: gnome
Tags:
 Kind of user interface: X11,
 Prog. language used to make the package: C,
 Suite: Gnome,
 User interface toolkit: GTK,
 Use: Editing,
 Works with: Text,
 Works with: Unicode text
```

What's on Debtags

- A tag vocabulary stored in svn;
- A central tag database that everyone can edit;
- A hand-reviewed authoritative database stored in svn;
- Tag data stored in the Packages file
- Indexed tag data for fast access (in /var/lib/debtags)
- Code.

http://debtags.alioth.debian.org

svn://svn.debian.org/debtags

svn://svn.debian.org/libapt-front

Commandline tools

```
DEBTAGS(1)

NAME

debtags - Manage package tag data in a Debian
```

system

SYNOPSIS

```
debtags [options] [command] [args...]
```

Commandline tools

C++ libraries (with Swig bindings)

Package: libtagcoll-dev

Description: Functions used to manipulate tagged collections

Tagged collections are collections of items tagged with multiple categories.

libtagcoll provides general infrastructure to handle tagged collection data, plus various kind of manipulation functions:

- apply various kinds of transformations to the collection;
- generate and apply tag patches;
- discover and show implicit hierarchical relationships between tags;
- organize the collection in an intuitively navigable hierarchy;
- keep an on-disk index of the tag data.

C++ libraries (with Swig bindings)

Package: libapt-front-dev

Description: High-level library for managing Debian packages

libapt-front is an high-level wrapper for libapt-pkg and libdebtags that makes it easier to develop package-aware applications such as package managers.

libapt-front is a joint effort by the debtags, adept and synaptic teams.

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Applications

Package: adept

Description: Package manager for KDE

Adept is a graphical package management tool based on the libapt-front API and KDE libraries. Adept is in alpha version, but already enables you to install, upgrade and remove software packages in a user friendly way.

Besides these basic functions the following features are provided:

- Search and filter the list of available packages (debtags support!)
- Perform smart system upgrades
- Edit the list of used repositories (sources.list)
- Configure packages through the debconf system

Applications

Package: debtags-edit

Description: GUI browser and editor for Debian Package Tags

debtags-edit is an experimental GUI program for browsing the Debian package archive and tagging packages. Its purpose is to make it easy and fast for everyone to update tag data.

Even if the program is still in the state of a prototype, it can already offer new and interesting package search functions, perform local customizations of the tag database and send local modifications for inclusion in the central tag archive.

Applications

Package: packagesearch

Description:

GUI for searching packages and viewing package information

Package: aptitude

Description: Terminal-based apt frontend

And tags show up in apt-cache as well, and can be used in grep-dctrl, and maybe also in some other place I don't know yet.

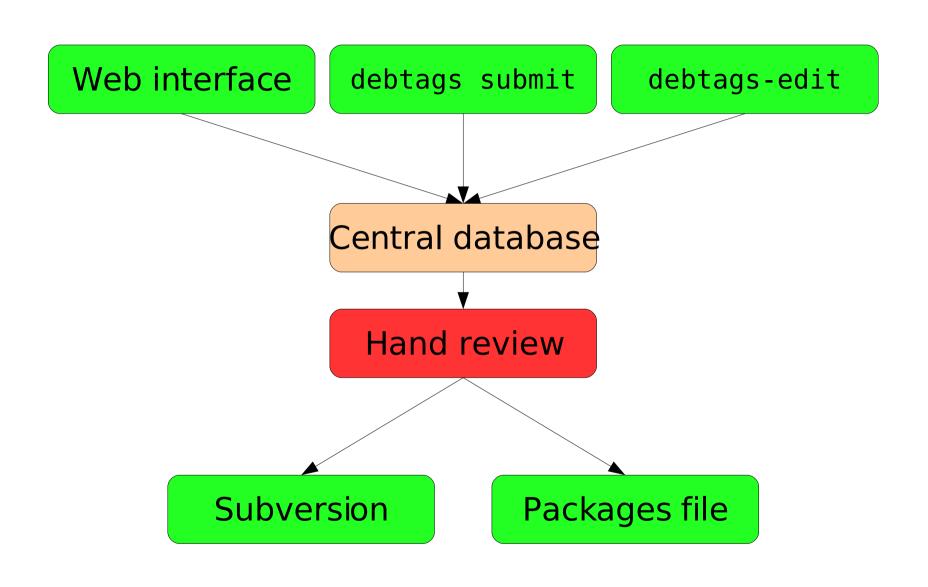
Web applications

```
http://debtags.alioth.debian.org/cgi-bin/search.cgi
```

http://debtags.alioth.debian.org/cgi-bin/index.cgi

http://debtags.alioth.debian.org/cgi-bin/edit.cgi?pkg=X

Contributing tags



TODO list

- Find less boring ways of hand-reviewing the tag data
- Carry on refactoring the central database
- Make simpler interfaces to tag data (hint: game index)

http://debtags.alioth.debian.org/
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libapt-front-devel@lists.alioth.debian.org