The debdelta suite

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debdelta is an application suite designed to compute changes between Debian packages. These changes (that we will call 'deltas') are similar to the output of the "diff" program in that they may be used to store and transmit only the changes between Debian packages. This suite contains 'debdelta-upgrade', that downloads deltas and use them to create all Debian packages needed for an 'apt-get upgrade'.

1. Overview

The debdelta application suite is really composed of different applications.

1.1. debdelta

debdelta computes the delta, that is, a file that encodes the difference between two Debian packages. Example:

```
\ a=/var/cache/apt/archives 
\ debdelta -v \ a/emacs-snapshot-common_1%3a20060512-1_all.deb \ \ a/emacs-snapshot-common_1%3a20060518-1_all.deb \ /tmp/emacs.debdelta
```

the result is: deb delta is 12.5% of deb; that is, 15452kB would be saved

1.2. debpatch

debpatch can use the delta file and a copy of the old Debian package to recreate the new Debian package. (This process is called "applying the delta file"). If the old Debian package is not available, but is installed in the host, it can use the installed data; in this case, '/' is used in lieu of the old .deb.

Example:

```
$ debpatch -A /tmp/emacs.debdelta / /tmp/emacs.deb
```