Release Notes for Debian GNU/Linux 3.0 (‘woody’), Alpha

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Chapter 1

What’s New in Debian GNU/Linux 3.0

[The most recent version of this document is always available at http://www.debian.org/releases/stable/releasenotes. If your version is more than a month old, you might wish to download the latest version.]

Previously Debian GNU/Linux 2.2 (’potato’) supported six computer architectures. In this release those six are joined by four more indicated by a trailing asterisk [*] below. Here is the full list of architectures for this release:

- Intel x86 (’i386’)
- Motorola 680x0 (’m68k’)
- Alpha (’alpha’)
- SPARC (’sparc’)
- PowerPC (’powerpc’)
- ARM (’arm’)
- MIPS (’mips’ (Big endian) and ’mipsel’ (Little endian)) [*]
- Intel Itanium (’ia64’) [*]
- HP PA-RISC (’hppa’) [*]
- S/390 (’s390’) [*]

You can read more about port status, and port-specific information for your architecture at the Debian port web pages (http://www.debian.org/ports/alpha/).

Debian GNU/Linux 3.0 for the Alpha architecture ships with kernel version 2.2.20.

The 2.2 kernel series has been updated and developed extensively introducing several valuable changes both in the kernel and in other programs based on kernel features, along with a whole slew of new hardware drivers and bug fixes for existing drivers.

A 2.4 kernel is also included in this release for optional installation by users. Although the 2.4 branch is considered by the kernel developers to be a stable kernel branch, the Debian GNU/Linux release team judged it not to have reached sufficient maturity for inclusion as the default kernel in this release.

1.1 What's New in the Installation System?

The new `debootstrap` tool downloads, unpacks and extracts Debian GNU/Linux packages for the base system installation. This is an improvement over the previous installation system which used a tarball containing the base system. The installation base system can be updated more dynamically with this system.

The task system has been revamped. Tasks in the previous release consisted of meta packages (packages which are simply collections of other packages). The new system uses special headers within the existing package system to designate any tasks to which each package may belong.

This allows greater selection of tasks and it is much easier to only install selected components of tasks, instead of the whole thing.

Almost all configuration at install time and for later reconfiguration is done using Debconf, which comes in a variety of flavours: a non-interactive method, dialog (curses-based), and a new GNOME frontend. Debconf's engine has also been revamped and improved and is now more flexible than ever. In short, Debconf makes the world go around :)

For full details on the Debian installation system, users are advised to read the Debian installation guide included on the first CD or at `http://www.debian.org/releases/stable/installmanual`

1.2 What's New in the Distribution?

At install time, the kernel used is 2.2.20, however a 2.4 kernel, the latest stable branch is included for those who wish to benefit from it.

The Debian package management tools apt and dpkg have been improved considerably in this release. Now apt supports "pinning" in which the user can opt to download certain packages from different distributions, e.g. testing or unstable, while still keeping the bulk of packages in the stable distribution. APT will automagically download and install appropriate dependent packages from the advanced distribution as required. An APT "pinning" howto (`http://www.debian.org/doc/manuals/apt-howto/ch-apt-get`) is available.

Build dependencies have been added to aid the compilation of source packages. The "build-dep" apt-get method can be used to retrieve all packages needed for a build before compilation is commenced.

To replace the aging, much-maligned, yet still popular `dselect`, many apt frontends have been in development during the woody release cycle. Interested users should investigate the `aptitude` package.

This release of Debian GNU/Linux contains the much improved XFree86 4.1 release, which includes support for a greater range of hardware, better autodetection support, and improved support for advanced technologies such as Xinerama and 3D acceleration. XFree86 3.3.6 is available as an option, to support older hardware that is not supported by XFree86 4.1.

Debian 3.0 is much more secure than previous releases. The base installation provides fewer unnecessary services that might be the target of attack. Debian 3.0 includes many more security-oriented applications such as firewall administration, server hardening, and intrusion detection. The packaging system has also been improved so it can be configured to automatically check digital signatures. When configured, it will refuse to install Debian packages if the digital signature doesn't match. This limits the possibility of trojan horse installation and makes it easier and safer for systems to automatically upgrade themselves over the Internet. Lastly, Debian now provides intensive documentation for the security-aware administrator including the 'Securing Debian Manual' (`http://www.debian.org/doc/manuals/securing-debian-howto/`) from the Debian Documentation Project (also available in the `harden-doc` package).

Debian 3.0 is also much more internationalized (`http://www.debian.org/international/`) than previous releases thanks to the ongoing work of free software translation teams. Debian includes default settings for more languages than previous releases, and more of its programs are international-ready. This includes the boot-floppies installation which has been translated to a number of languages. There is extensive support for French, German, Italian, Japanese, Portuguese, Spanish, Catalan and Danish, and there are more than fifteen active translation teams.

For the first time, Debian GNU/Linux includes several full featured free graphical web browsers in the form of Mozilla, Galeon and Konqueror. With the inclusion of KDE 2.2 for the first time, as well as the new GNOME 1.4 release, Debian's desktop provision has been radically improved.

The official Debian GNU/Linux distribution now ships on seven binary CDs with a similar number of source CDs, and a DVD version of the distribution is now also available.

Chapter 2

New Installations

If you are making a new installation of Debian, you should read the installation manual, which is available on the Official CD at:

```
/dists/woody/main/disks-alpha/current/doc/install.txt
(or .html)
```

or on the Internet at: `http://www.debian.org/releases/stable/installmanual`

The Debian installation system, which is called the `boot-floppies` (even though it supports more than just floppies), has been further streamlined and upgraded for users' convenience.

Chapter 3

Upgrades from Previous Releases

3.1 Detailed Changes to the System

3.1.1 Important program syntax changes

Debian attempts to avoid changing upstream packages, therefore changes in the original packages will be present in Debian GNU/Linux

In Debian GNU/Linux 2.2 'Potato' release `tar` used the

```
-I
```

switch for `bzip` compression, however now the

```
-j
```

switch is in use. You may need to change any scripts accordingly.

3.1.2 Note for users of virus scanners

Users of virus scanners such as `amavis`, `scannerdaemon` and `clamav` should keep their packages up-to-date otherwise there is the possibility that a buggy package could allow viruses to pass into or out of the system, with horrific consequences. It should also be mentioned that the virus database in woody is now static and obsolete. Pinning the antivirus packages from testing or unstable may be a possible solution.

3.1.3 Estonian Timezone

Regulation nr. 84 (21.02.2002, Estonian Government), valid from 01.03.2002, says, that starting from this year (spring, 2002), there is a daylight savings time in Estonia. The beginning of daylight savings time (“summer time” in estonian) is on last Sunday of March 01:00 GMT (03:00

local time) and end on last Sunday of October 01:00 GMT (04:00 local time). You should be able to use exactly the same rules as for Helsinki in `/usr/share/zoneinfo/Europe/Helsinki` file.

3.1.4 Upgrading PostgreSQL

The new version of PostgreSQL is more strict and restrictive in its input handling. This means that tests line `foo = NULL` which is not valid anyway won't be accepted anymore. This also means that when using UNICODE encoding, ISO 8859-1 and ISO 8859-15 are no longer valid encodings to use when inserting data into the relation in question. In such a case you are advised to convert the corresponding relation dump, which you can alway make using `pg_dump -t table database`, using `recode latin1..utf-16`.

This particular change can also affect the upgrade process, since dumping and importing data from the old and into the new database may stomp over illegal input.

3.1.5 Notes for users of sendmail/m4

The version of m4 in woody does not run on Linux kernels from the 2.0 series. It is therefore strongly recommended that users of sendmail upgrade to a 2.2 series or better Linux kernel before proceeding with the upgrade.

3.2 Preparing for the Upgrade

Before upgrading your system, it is strongly recommended that you make a full backup, or at least backup any data or configuration information you can't afford to lose. The upgrade tools and process are quite reliable, but a hardware failure in the middle of an upgrade could result in a severely damaged system.

The main things you'll want to back up are the contents of `/etc`, `/var/lib/dpkg` and the output of `dpkg --get-selections \*`.

It's wise to inform all users in advance of any upgrades you're planning, although users accessing your system via ssh (at least) shouldn't notice much during the upgrade, and may want to continue working. If you wish to take extra precautions, back up or unmount user's partitions (`/home`) before upgrading. A reboot will not normally be necessary.

Distribution upgrade should be done either locally from a textmode virtual console (or a directly connected serial terminal), or remotely via an `ssh` link.

Important: You should *not* upgrade using `telnet`, `rlogin`, `rsh`, or from an X session managed by `xdm` on the machine you are upgrading. That is because each of those services may well be terminated during the upgrade, which can result in an *inaccessible* system that is only half-upgraded.

3.2.1 Checking Packages Status

Regardless of the method used for upgrading, it is recommended that you check the status of all packages first, and verify that all packages are in an upgradable state. The following command will show any packages which have a status of Half-Installed or Failed-Config, and those with any error status.

```
# dpkg --audit
```

You could also inspect the state of all packages on your system using `dselect`, or with commands such as

```
# dpkg -l | pager
```

or

```
# dpkg --get-selections > ~/curr-pkgs.txt
```

It is desirable to remove any holds before upgrading. If any package that is essential for the upgrade is on hold, the upgrade will fail. You can identify packages on hold with

```
# dpkg --audit
```

If you changed and recompiled a package locally, and didn't rename it or put an epoch in the version, you must put it on hold to prevent it from being upgraded. The 'hold' package state can be changed either by using `dselect` (in the Select menu, use the 'H' and 'G' keys to hold and unhold, respectively), or by editing the file produced by

```
dpkg --get-selections > ~/curr-sels.txt
```

to change "hold" to "install" (or vice versa), and then, with root permissions, doing

```
dpkg --set-selections < ~/curr-sels.txt
```

3.2.2 Special Considerations for SSH Users

The commercial SSH located in the `ssh` package before release 2.2 or in the `ssh-nonfree` in release 2.2 has been replaced by the DFSG free `ssh` package (OpenSSH) in this release. The commercial SSH collection is no longer present. The `ssh` package includes a Debconf question which will regenerate a configuration which is OpenSSH compatible.

3.2.3 Directories Possibly Needing Attention

It is important that the `/etc/rcS.d` directory exists prior to the upgrade; the installation of the `libc6` package will fail otherwise.

The `/usr/share/doc` directory (if it exists already) should not be a symlink (e.g. to `/usr/doc`), since that will cause some packages to break. However, symlinking `/usr/doc` to `/usr/share/doc` is allowed. Please note that if you use such a symlink there will be numerous messages about `/usr/doc` directories that can't be removed. Those are normal, and you can safely ignore them.

3.3 Preparing Sources for APT

The recommended method of upgrading is to use the `apt` method with `dselect`, as described here. The built-in dependency analysis enables smooth upgrades and easy installations.

You should *not* be doing any major package upgrades with access methods other than `apt` in `dselect`, because those, unlike the `apt` method, do not do any logical package ordering during the installation, and therefore aren't as reliable. Additionally, such upgrades are not well tested and are unsupported by Debian.

Any package installation operation must be run with superuser privileges, so either login as root or use `su` or `sudo` to gain the necessary access rights.

Before starting the upgrade you must set up `apt`'s configuration file for package lists, `/etc/apt/sources.list`.

`apt` will consider all packages that can be found via any "`deb`" line, and install the package with the highest version number, giving priority to the first mentioned lines (that way, in case of multiple mirror locations, you'd typically first name a local harddisk, then CD-ROMs, and then HTTP/FTP mirrors).

3.3.1 Adding APT Internet Sources

The default configuration is set up for installation from main Debian Internet servers, but you may wish to modify `/etc/apt/sources.list` to use other mirrors, preferably a mirror that is network-wise closest to you.

Otherwise, Debian HTTP or FTP mirror addresses can be found at http://www.debian.org/distrib/ftplist (look at the "Full list of mirrors" section). HTTP mirrors are generally speedier than ftp mirrors.

For example, suppose your closest Debian mirror is `http://mirrors.kernel.org/debian/`. When inspecting that mirror with a web browser or FTP program, you will notice that the main directories are organized like this:

```
http://mirrors.kernel.org/debian/dists/woody/main/binary-alpha/.
http://mirrors.kernel.org/debian/dists/woody/contrib/binary-alph
```

To use this mirror with `apt`, you add this line to your `sources.list` file:

```
deb http://mirrors.kernel.org/debian woody main contrib
```

Note that the '`dists`' is added implicitly, and the arguments after the release name are used to expand the path into multiple directories.

After adding your new sources, disable the previously existing "`deb`" lines in `sources.list`, by placing a hash sign (#) in front of them.

Any package needed for installation that is fetched from the network is stored in the `/var/cache/apt/archives` (and the `partial/` subdirectory, during download), so you must make sure you have enough space before attempting to start the installation. With a reasonably extended Debian installation, you can expect at least 300 MB of downloaded data.

Note: if you are using the static versions of `apt` and `dpkg`, the hostname-lookup is broken (which is one reason to use the normal `apt` when upgrading over the network). The solution is to simply put the mirrors' IP address in the "`deb`" line. (Hint: `nslookup some-server`)

3.3.2 Adding APT Local Mirror Sources

Instead of using HTTP or FTP packages mirrors, you may wish to modify `/etc/apt/sources.list` to use a mirror on a local disk (possibly NFS-mounted).

For example, your packages mirror may be under `/var/ftp/debian/`, and have main directories like this:

```
/var/ftp/debian/dists/woody/main/binary-alpha/...
/var/ftp/debian/dists/woody/contrib/binary-alpha/...
```

To use this with `apt`, add this line to your `sources.list` file:

```
deb file:/var/ftp/debian woody main contrib
```

Note that the 'dists' is added implicitly, and the arguments after the release name are used to expand the path into multiple directories.

After adding your new sources, disable the previously existing "deb" lines in sources.list, by placing a hash sign (#) in front of them.

3.3.3 Adding APT CD-ROM Sources

See above if you need to first install the latest version of apt and dpkg packages, as described above.

If you want to use CDs *only*, comment out the existing "deb" lines in /etc/apt /sources.list by placing a hash sign (#) in front of them.

Make sure there is a line in /etc/fstab that enables mounting your CD-ROM drive at the /cdrom mount point (the exact /cdrom mount point is required for apt-cdrom).For example, if /dev/hdc is your CD-ROM drive, /etc/fstab should contain a line like:

```
/dev/hdc /cdrom auto defaults,noauto,ro 0 0
```

Note that there must be *no spaces* between the words defaults,noauto,ro in the fourth field.

To verify it works, insert a CD and try running

```
mount /cdrom (this will mount the CD to the mount point)
ls -alF /cdrom (this should show the CD's root directory)
umount /cdrom (this will unmount the CD)
```

Next, run:

```
apt-cdrom add
```

for each Debian Binary CD-ROM you have, to add the data about each CD to APT's database.

3.4 Upgrading using dselect

The recommended method for upgrading to Debian GNU/Linux 3.0 is using the package management tool dselect. This tool makes safer decisions about packages than apt-get.

If dselect is not installed please install the version supplied with your release of Debian GNU/Linux.

The access method for the archive (using APT) has already been configured, you can change this configuration however using the "[A]ccess" method on the menu. If you are happy with your access configuration proceed to the next stage by selecting "[U]pdate" from the menu. This will update the package database.

If no problems occured with the update stage, choose "[S]elect" from the menu, dselect will examine the available packages and intelligently decide which packages need upgrading and which new packages need to be installed to compliment the upgrades. It will also suggest packages that should be removed. Hitting return at the package selection screen will either give you a conflict/dependency resolution screen (at which you may have to change selections and press return again) or return you to the main menu. Help on the package selection stage is available by pressing "?".

Now that the package selections have been decided it is necessary to install any new packages, to do this choose "[I]nstall" from the main menu. This will download and install the packages using APT from your prefered medium. Go and have a nice cup of Earl Grey, this is going to take some time.

The final two stages are "[C]onfig" and "[R]emove" which will finish the upgrade process by configuring the new packages and removing any redudant packages

3.5 Upgrading using apt-get directly (not recommended)

Don't forget to mount all needed partitions (notably the root and /usr partitions) read-write, with a command like:

```
mount -o remount,rw /mountpoint
```

Assuming you have already configured apt's sources.list as explained above, run (as root):

```
apt-get update
```

This will resynchronize the package overview files from their sources, updating information about new and updated packages.

It is strongly recommended that you use the /usr/bin/script program to record a transcript of the upgrade session. Then if any problems develop, you will have a log of what happened, and if needed, can provide exact information in a bug report. To start the recording, type:

```
script -a ~/upgrade-to-woody.typescript
```

or similar. Do not put the typescript file in a temporary directory such as `/tmp` or `/var/tmp` (files in those directories may be deleted during the upgrade or during any restart).

It is important to upgrade apt, dpkg and debconf before you do the majority of the upgrade. Apt has been considerably improved since the previous releases. Debconf is an essential tool which is in extensive use in recent packages.

```
apt-get install dpkg apt debconf
```

This will install the newest versions of `dpkg`, `apt` and `debconf`, which are needed for the rest of the upgrade. It will also upgrade some necessary system libraries to the latest version.

When debconf asks about the kind of questions to ask, do not choose 'critical', or else you will miss important questions.

Some people prefer to first rehearse the upgrade using

```
apt-get --fix-broken --show-upgraded --simulate dist-upgrade | pa
```

While this may be somewhat time consuming, it may avoid some surprises. This will tell you either what's wrong with your system (and how to solve it), or, most likely, what exactly will be done during the upgrade. Pay special attention to the packages that will be "REMOVED"; no essential packages should be listed there.

After you have verified that `apt-get` should work fine, run:

```
apt-get --fix-broken --show-upgraded dist-upgrade
```

This will perform a complete upgrade of the system, i.e. install the newest available versions of all packages, and resolve all possible dependency changes between packages in different releases. If necessary, it will install some new packages (usually new library versions, or renamed packages), and remove any conflicting obsoleted packages.

When upgrading from a set of CD-ROMs, you will be asked to insert specific CDs at several points during the upgrade. You might have to insert the same CD multiple times; this is due to inter-related packages that have been spread out over the CDs.

New versions of currently installed packages that cannot be upgraded without changing the install status of another package will be left at their current version (displayed as "held back"). Therefore, it may be necessary to use `dpkg` or `dselect` to remove and reinstall some broken packages or dependencies. Alternatively, `apt-get dselect-upgrade` may be used after `apt-get -f dist-upgrade`.(See the `apt-get(8)` man page.)

The `--fix-broken` (or just `-f`) option causes `apt` to attempt to correct a system with broken dependencies in place. `apt` does not allow broken package dependencies to exist on a system.

3.5.1 Possible Issues During or After Upgrade

Sometimes it's necessary to enable APT::Force-LoopBreak option in APT to be able to temporarily remove an essential package due to a Conflicts/Pre-Depends loop. `apt-get` will alert you of this and abort the upgrade. You can work around that by specifying `-o APT::Force-LoopBreak=1` option on `apt-get` command line.

It is possible that a system's dependency structure can be so corrupt as to require manual intervention. Usually this means using `dselect` or

```
dpkg --remove packagename
```

to eliminate some of the offending packages, or

```
apt-get --fix-broken --show-upgraded install
dpkg --configure --pending
```

In extreme cases you might have to force re-installation with a command like

```
dpkg --install /path/to/packagename.deb
```

After fixing things up, you should be able to resume the upgrade by repeating the previously described `dist-upgrade` commands.

During the upgrade, you will be asked questions to configure or re-configure several packages. When you are asked if any file in the `/etc/init.d` or `/etc/terminfo` directories, or the `/etc/manpath.config` file should be replaced by the package maintainer's version, it's usually necessary to answer 'yes' to ensure system consistency. You can always revert to the old versions, since they will be saved with a `.dpkg-old` extension.

If you're not sure what to do, write down the name of the package or file, and sort things out at a later time. You can search in the typescript file to review the information that was on the screen during the upgrade.

3.5.2 ToDo Before the Next Reboot

When `apt-get dist-upgrade` has finished, the "formal" upgrade is complete, but there are some other things that should be taken care of *before* the next reboot.

Most importantly, packages `locales` and `util-linux` may need to be installed. This can be done with:

```
apt-get install locales util-linux
```

If you were upgrading from Debian version 2.0 or earlier, this will remove the getty package, because getty is now in the util-linux package.

There probably are several more packages that need to be installed, that are not noticed by apt-get, because apt-get doesn't automatically select the packages that aren't depended on by other packages (e.g. all packages in Recommends: and Suggests: fields). These can quite easily be found when using dselect or another visual frontend. In dselect, pick the 'apt' method in the [A]ccess screen (if you haven't already) and update the database with new packages information, using the [U]pdate option. After that, in the [S]elect screen, press 'o', 'o', 'v' and Shift-d, and then search for the

```
--- Obsolete and local packages present on system ---
```

header. In that section, all such packages will be shown. For example, the old gimp package has been replaced by gimp1.2. You can either install the new package via dselect (which will then show a "dependency conflict resolution" screen indicating that the old packages should be removed), or by using:

```
apt-get install gimp1.2
```

which will remove the older versions at once (you might just need to confirm).

Another example, that is often not shown even in dselect, are the telnet and talk clients and servers, and the NFS server, which were split off from the old netstd package. You can install them with a command like:

```
apt-get install telnet telnetd talk talkd nfs-server
```

The same applies to manpages-dev, which was split off from manpages.

Please refer to the Release Notes document for previous releases of Debian GNU/Linux for more information about packages that were split in that release; go back and read 'Renamed Packages' on page 23 and 'Split Packages' on page 25 to see the list of packages split in this release.

Note that the Linux kernel was *not* upgraded by these procedures.You may wish to do so yourself, either by installing one of the kernel-image-* packages or by compiling a customized kernel from sources.

Debian GNU/Linux comes with a 2.2.20 which is in the 2.2 series, the older stable Linux kernel series. You may wish to use a 2.4 series kernel for better hardware support or improved performace. Booting the third cdrom will do this automagically or you can use install a prebuilt one.

```
apt-get install kernel-image-2.4.18-{386,586tsc,686}
```

For the more adventurous, there is an easy way to compile your own custom kernel on Debian GNU/Linux. Install the `kernel-package` tool and read the documentation in `/usr/share/doc/kernel-package`.

Enjoy your new Debian GNU/Linux 3.0 system! :-)

Chapter 4

More information on Debian GNU/Linux

4.1 Further Reading

Beyond these release notes and the installation guide further documentation on Debian GNU/Linux is available from the Debian Documentation Project (DDP), whose goal is to create high quality documentation for Debian users and developers. Documentation including the Debian Guide, Debian New Maintainers Guide, and Debian FAQ are available, and many more. For full details of the resources available see the DDP website at `http://www.debian.org/doc/ddp`

Documentation for individual packages is installed into `/usr/share/doc/`*`package`*, this may include copyright information, Debian specific details and any upstream documentation.

4.2 Getting Help

There are many sources of help, advice and support for Debian users, but these should only be considered if research into documentation of the issue has exhausted all sources. This section provides a short introduction into these which may be helpful for new Debian users.

4.2.1 Mailing lists

The mailing lists of most interest to Debian users are the debian-user (English) and other debian-user-*language* lists (for other languages). For information on these lists and details of how to subscribe see `http://lists.debian.org/`. Please check the archives for answers to your question prior to posting and also adhere to standard list etiquette.

4.2.2 Internet Relay Chat

Debian has an IRC channel dedicated to the support and aid of Debian users located on the Open Projects IRC network which is dedicated to providing collaborative information sharing resources for the Open Source community. To access the channel point your favourite IRC client at irc.openprojects.net and join #debian.

Please follow the channel guidelines, respecting other users fully. For more information on Open Projects please visit the website (http://www.openprojects.net/).

4.3 Reporting Bugs

We strive to make Debian GNU/Linux a high quality operating system, however that does not mean that the packages we provide are totally free of bugs. As our service to our users we provide all the information on reported bugs at our own Bug Tracking System (BTS) browseable at bugs.debian.org (http://bugs.debian.org/), this is consistent with Debian's open development.

If you find a bug in the distribution or in packaged software that is part of it, please report it so that it can be properly fixed for next releases. Reporting bugs requires a valid email address, we ask for this so that we can trace bugs and developers can get in contact with submitters should they need more information.

You can submit a bug report either using the programs `reportbug` and `bug` (available in their apropriate packages) or manually using email. You can read more about the Bug Tracking System and how to use it by reading the reference cards (available at `/usr/share/doc/debian` in any installed system) or online at the Bug Tracking System (http://bugs.debian.org/).

4.4 Contributing to Debian

You do not need to be an expert to contribute to Debian. By assisting users with problems on the various user support lists (http://lists.debian.org/) you are contributing to the community. Identifying (and importantly solving) problems related to the development of the distribution by participating on the development lists (http://lists.debian.org/) is also extremely helpful. To maintain Debian's high quality distribution submit bugs (http://bugs.debian.org/) and help developers track them down and fix them. If you have a way with words then you may want to contribute more actively by helping to write documentation (http://www.debian.org/doc/ddp) or translate (http://www.debian.org/international/) existing documentation into your own language.

If you can dedicate more time, you could manage a piece of the Free Software collection within Debian. Especially helpful is if people adopt or maintain items that people have requested for inclusion within Debian, the Work Needing and Prospective Packages database (http://www.debian.org/devel/wnpp/) details this information. If you have an interest in specific groups then you may find enjoyment in contributing to some of Debian's subprojects which include ports to particular architectures, Debian Jr. (http://www.debian.org/devel/debian-jr/) and Debian Med (http://www.debian.org/devel/debian-med/).

In any case, if you are working in the free software community in any way, as a user, programmer, writer or translator you are already helping the free software effort. Contributing is rewarding and fun, and as well as allowing you to meet new people it gives you that warm fuzzy feeling inside.

Chapter 5

Appendix

5.1 Renamed Packages

The following packages have been renamed as shown. In most, if not all, cases, Conflicts:, Replaces:, and Provides: fields (or even dummy packages) have been provided so the new package will either get installed automatically, and/or will safely replace or remove the old one. This also includes packages that have been merged into other packages as this gives the same end result as a rename.

```
gimp -> gimp1.2 (GIMP1.2 release only)
sawmill -> sawfish
dict-web1913 -> dictgcide
amcl -> gnome-mud
rstart -> xutils
rstartd -> xutils
xbooks -> xspecs
xfonts-cjk -> xfonts-base
xcontrib -> xbase-clients
xlib6g-static -> xlibs-dev
listar -> ecartis
cln -> libcln2
cln-dev -> libcln-dev
pgp-i, pgp-us -> pgp
cvs-doc -> cvs
acm -> acm4
user-ja -> language-env
expect5.31, expect5.24 -> expect
sgml-tools -> linuxdoc-tools
sgmltools-2 -> sgmltools-lite
bonnie -> bonnie++
c2ps -> a2ps
camlp4 -> ocaml
corel-util -> nwutil
crossfire-sounds -> crossfire-client-sounds
cslatex, csplain, cstexfonts -> tetex
cspsfonts -> tetex-extra
custom-mule -> mule2-support
docbook2x, cygnus-stylesheets -> docbook-utils
db -> db2
dgs -> xfree86
docbook-stylesheets -> docbook-dsssl
genius, drgeo -> drgenius
egcs1.0 -> egcs1.1
emacs19 -> emacs20
f77reorder -> g77
flim1.13 -> flim
gdict -> gnome-utils
libgmp2, gmp, gmp1 -> libgmp3
gnome-users-guide-en -> gnome-user-docs
gnomehack -> nethack
gpasm -> gputils
gsl-ref-pdf -> gsl-ref-ps
gstep-core -> gnustep-core
gstep-extensions -> gnustep-extensions
gstep-guile -> gnustep-guile
gzilla -> dillo
hanterm -> hanterm-xf
imap -> uw-imap
iplogger -> ippl
jgroff -> groff
lib-sax-java, lib-xp-java, lib-xt-java -> xalan2, libxt-java
libansicolor-perl -> perl
libape -> libcommonc++
libgc4 -> libgc6
libgcj -> libgcj2
libid3 -> id3lib
libmalaga1 -> malaga
libmpeg-mp3info-perl -> libmp3-info-perl
libpth -> pth
libv1.22 -> libv1.25
listar -> ecartis
lvm -> lvm10
mdutils -> raidtools2
mutt-ja -> mutt
myodbc2.50.26 -> libmyodbc
oldncurses, ncurses3.4, ncurses4.2 -> ncurses (5.2)
```

```
nfs-server -> nfs-user-server
palm-doctoolkit -> pyrite-publisher
pbm2ppa -> pnm2ppa
pcre, pcre2 -> pcre3
puzzle -> tree-puzzle
rt -> root-tail
selfhtml -> chaos, t-gnus
sgmlspm -> libsgmls-perl
synaptics -> tpconfig
tknamazu -> namazu2
typist -> gtypist
umich-ldap -> openldap
wanderlust2 -> wl-beta
wdsetup -> nictools-nopci
wnn6-dev -> wnn6-sdk
wxftp -> axyftp
xacc -> gnucash
xjscal -> libjsw
zope-siteaccess -> zope
```

Although we have made every effort to complete this list, it may still not be exhaustive.

5.2 Split Packages

Between releases 2.2 (‘potato’) and 3.0 (‘woody’), a number of packages have been split into two or more packages. The reason for these splits, in general, is that the original package provided a diverse set of functionalities, and that few, if any, users used all of these components.Some packages will display a notice warning of the split during the installation, some mention it in the package description, and some just ignore it.

If you find that a familiar package is lacking some or all of its functionality, check the list below to see if you need to install additional packages to restore the original functionality. Failing that, check the changelog for the package, which can be found in `/usr/share/doc` `/`*`package`*`/changelog.Debian.gz`.

The following is a list of packages that have been split (this list may not be complete):

```
isdnutils -> ipppd, isdnlog, isdnutils-doc, isdnutils-xtools,
isdnvboxserver, isdnvboxclient

xpdf -> xpdf-reader, xpdf-utils, xpdf-chinese-simplified,
xpdf-chinese-traditional, xpdf-cyrillic, xpdf-japanese,
xpdf-korean,xpdf-thai
```

```
cupsys -> cupsys (CUPS daemon), cupsys-client (CUPS client),
cupsys-pstoraster (postscript rasterizer)

groff -> groff-base, groff, groff-x11

xspectemu -> spectemu-common, spectemu-svga, spectemu-x11

ecpg ->  libecpg3 (library), postgresql-dev (development files)

postgresql-pl -> libpgperl, libpgtcl

netbase -> netbase, portmap, ifupdown, ipautofw, ipchains,
ipfwadm, ipmasqadm, iputils, net-tools, netkit-base

uqwk -> uqwk, uqwk-spool

tetex-bin -> tetex-bin, texi2html

xproxy -> lbxproxy, proxymngr, xfwp

xlib6g -> xlibs, libxaw6

xlib6g-dev -> libxaw6-dev, xlibs-dev

xbase-clients, xlib6g-dev, xcontrib -> xutils

xconq -> xconq, xconq-common

python-imaging-doc -> python-imaging-doc,
python-imaging-doc-html, python-imaging-doc-pdf

gnumeric -> gnumeric, gnumeric-doc, gnumeric-python

latex2rtf -> latex2rtf, latex2rtf-doc

glade -> glade, glade-gnome, glade-gnome-db, glade-common,
glade-doc

apmd -> apmd, xapm, libapm1, libapm-dev, powermgmt-base

uudeview -> uudeview, xdeview, libuu-dev

sysklogd -> sysklogd, klogd

xtide -> xtide, xtide-data
```

```
snack -> libsnack2, libsnack2-dev, libsnack2-doc

gnapster -> gnapster, gnapster-gtk

proftpd -> proftpd, proftpd-common, proftpd-doc, proftpd-ldap,
proftpd-mysql, proftpd-pgsql

alsaplayer -> alsaplayer-common, alsaplayer-gtk, alsaplayer-nas,
alsaplayer-text, libalsaplayer-dev, libalsaplayer0
```

5.3 Removed packages

5.3.1 Packages removed because of no maintainer

These are packages which have been removed because no Debian maintainer was interested in maintaining them. The number associated with the bug is included as this provides further information on the reason why the package was removed. To use this number visit the Bug Tracking System (http://bugs.debian.org/) and do a query based on the bugnumber.

The alternatives field lists any packages that might replace the removed package.

```
asclock-gtk
Alternatives: asclock, gnome-applets
Bug: #91943

bridge, bridgex
Bug: #80926

bwnfsd
Bug: #107083

dialdcost
Bug: #90361

dotfile-doc
Bug: #116545

dstool
Bug: #68308

dstool-doc
Bug: #68309

gmasqdialer
```

```
Bug: #127196

gnats2w
Bug: #123544

ical
Bug: #92286

ircd-dalnet
Alternatives: ircd, dancer-ircd
Bug: #93627

ivtools, ivtools-bin, ivtools-dev, ivtools-interviews, ivtools-un

jaztool
Bug: #91797

libggidemos
Bug: #111965

libliteclue
Bug: #95503

libtclobjc
Bug: #108187

mico-2.3.0
Bug: #91274

pact
Bug: #72432

ppd-gs
Bug: #68081

sliplogin
Bug: #68104

x48
Bug: #110944
```

5.3.2 Packages lacking upstream

These are packages which have been removed because they lack an upstream maintainer. The number associated with the bug is included as this provides further information on the reason why the package was removed. To use this number visit the Bug Tracking System (http://bugs.debian.org/) and do a query based on the bugnumber.

The alternatives field lists any packages that might replace the removed package.

```
abacus
Alternatives: gnumeric
Bug: #89715

arena
Alternatives: mozilla, konqueror
Bug: #83867

bezerk
Alternatives: irssi-gtk
Bug: #86611

blackjack
Bug: #110369 110313

cdwrite
Alternatives: cdrecord
Bug: #80353

dejasearch
Bug: #114643

dsc
Bug: #92576

dtm
Bug: #82741

empire-ptkei
Bug: #86230

express
Bug: #80396

fakebo
Bug: #82481

gnome-napster
Alternatives: gnapster, gnapster-gtk, lopster
Bug: #87380
```

```
icl-faq
Bug: #105385

libhtml-ep-perl
Bug: #89376

libtcl-ldap
Bug: #113574

macgate
Bug: #85261

maplay3
Alternatives: madplay, mpg321, xmms
Bug: #132374

pyrite
Bug: #102307

scwm
Bug: #115814

zicq
Alternatives: vicq, gabber, gaim
Bug: #117936
```

5.3.3 Packages removed for other reasons

The reason for the removal of the package is listed below the name of the package. The number associated with the bug is included as this provides further information on the reason why the package was removed. To use this number visit the Bug Tracking System (`http://bugs.debian.org/`) and do a query based on the bugnumber.

The alternatives field lists any packages that might replace the removed package.

```
ae
Replaced by the more user-friendly editor nano
Alternatives: nano
Bug: #110678

barracuda
Moved to non-US but never appeared there

darxite
Remotely exploitable buffer overflow. Not easy to fix, would
```

```
require full audit
Bug: #87406

dhcpcd
Buggy, insecure, better alternatives are available
Alternatives: dhcp-client, udhcpc
Bug: #81627

dosemu
Moved to contrib

dtlk
Obsolete, now comes with kernel
Bug: #97532

empire-pei
Out of sync with empire server
Bug: #82466

guavac
Old, obsolete, jikes is better
Alternatives: jikes
Bug: #68246

ldp-ligs, ldp-lkmpg, ldp-sag-it
License problems
Bug: #80782

libdnd
Old and unused
Bug: #83565

nextaw
No longer works with XFree86 4
Alternatives: libxaw7
Bug: #105532

omirr
Obsolete; only works with kernel 2.0.11
Bug: #79833

povray-manual
Large, non-free, downloadable from web, non-compliant HTML, non-c
policy
Bug: #82587
```

```
sharc
Obsolete, it was providing relay-filtering for sendmail before
sendmail had this feature.
Alternatives: sendmail
Bug: #92655

dftp

gnuchess

elm-me+
```