An Overview of Debian Policy (version 2.5.0.0, 1998-10-30)

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Related Policy Documents Debian Packaging Manual (in *packaging-manual*), FSSTND (in *debian-policy*), Authoritative List Of Virtual Package Names (in *debian-policy*), FHS (`http://www.pathname.com/fhs/`), Debian Menu System (in *menu*).

The Debian Archive main, non-us, non-free, and contrib.

The Debian Free Software Guidelines (DFSG) include source, be freely redistributable even with modifications, be nondiscriminatory. E.g., /usr/doc/copyright/{Artistic,BSD,GPL,LGPL}.

Package Control Data pkg name, maintainer, description, priority (required, important, standard, optional, extra), depends, recommends, suggests, essential flag, pre-dependencies, virtual packages (provides), conflicts, replaces (alternatively there is dpkg-divert or update-alternatives), conffiles, maintainer scripts ({post,pre}{inst,rm}).

Source packages specify Standards-Version, modify upstream source as little as possible, modify Makefile.in rather than Makefile, trap makefile errors (sh generally ignores errors!), maintain debian/changelog and debian/copyright (which are installed in the binary package in /usr/doc).

Run Levels The scripts for each run level are located at /etc/rc?.d/[KS][0-9][0-9]pkg where "?" gives the run level (0-6, S), "K" or "S" tells weather to Kill or Start the service (K scripts run first), [0-9][0-9] specifies the order in which the scripts are run (lower numbers run first) and "pkg" is the name of the package that installed the script. These scripts are actually symbolic links created by the package postinst (using update-rc.d(8)). The scripts in init.d can take one of the following options: start, stop, restart, force-reload, and reload (optional). These scripts should be robust in case the service is already running or not running and in case of package removal (use start-stop-daemon(8). Scripts should follow the Debian format for console messages. There is an example script: /etc/init.d/skeleton.

/etc/rc.boot Scripts invoked once per machine boot.

Keyboard Configuration All keyboard events should be independent of terminal (the console, X11, telnet, etc.). Delete and BS should work like it does on PCs.

Documentation All executables in /{usr,}/{s,}bin should have a nroff source man page installed under /usr/man. Info documentation (if available) is installed under /usr/info (use install-info to add to the info dir file). If appropriate, packages should install a menu in /usr/lib/menu. HTML is the preferred documentation format for Debian. http://localhost/doc/ should provide access to the documentation under /usr/doc (if a web server is installed).

Binary Files Should be compiled with the make(1) variables "CC = gcc CFLAGS = -O2 -g -Wall". Binaries should be striped using `install -s` or strip(1).

Libraries There must be two packages: the librarynamesoname package contains the shared library (compiled with -fPIC and stripped with `strip --strip-unneeded`) and the librarynamesoname-dev package containing the static version. Always use the gcc option -D_REENTRANT when compiling libraries.

Package Maintainer Scripts The {post,pre}{inst,rm} scripts must be scripts and must fail if any error occurs (sh scripts should use `set -e` or check every command). In order to use #!/bin/sh, scripts must be POSIX compliant (ash(1)). Must use tempfile(1) or mktemp(1) or compatible mechanism to write a file in /tmp or other world-writable directory.

Conffiles Must live in /etc. If more than one package uses a conffile, then only one can declare it as a conffile and it should provide a config script for editing the conffile. It is best to put nothing in /etc/skel.

Cron Packages should not touch /etc/crontab (a conffile for the *cron* package). Package provided cron jobs should be scripts, listed as conffiles, and placed in /etc/cron.{d,monthly,weekly,daily}/pkgname. Note: /etc/cron.d is not handled by *anacron*. Scripts should be robust enough to handle the removal of the package.

File Permissions and Owners Generally, files should be owned by root.root. Directories should be mode 755 or 2775 (for group writeability), executables should be mode 755, setuid or setgid executables should be mode 4755 or 2755, respectively. Restricted setuid binaries should be mode 4754. There are many exceptions.

/usr/local FSSTND: bin, doc, etc, games, lib, info, man, sbin, src; FHS: remove doc, etc, info, man; and add include, share. Debian packages may not make subdirectories of /usr/local. Other than their postinst/prerm scripts adding/removing directories within the FSSTND specified ones, nothing in /usr/local may be touched.

System UIDs and GIDs

0–99	Statically allocated system accounts
100–999	Dynamically allocated system accounts
1000–29999	Dynamically allocated user accounts
30000–59999	Reserved
60000–64999	Statically allocated by the Debian Project
65000–65533	Reserved
65534	nobody; nogroup
65535	$(uid\_t)(-1) = (gid\_t)(-1) \equiv$ The error return value