

## 1 The Aim of this Workshop

We do not expect you to be able to write your own commands or develop your own scripts straight away, but we shall teach you a lot about `bash` by using it and seeing what happens.

The exercises in the accompanying handout shall take you through `bash` in detail. This should get you the stage where you are confident enough to read commands and scripts written by others, figure out what they are doing, and then adapt them for your own purposes.

## 2 What can I do with the Command Line?

```
-- Define Aliases
-- Case conditional branching
-- Command chaining
-- Command History
-- Command-Line expansion
-- Conditional execution of subsequent commands
-- Conditional If-Then-Else
-- Error return codes
-- Job control Foreground/Background processing
-- Loops For-While-Until
-- Menu creation
-- Positional parameters
-- Quoting and Escaping
-- Read Command Manuals
-- Redirection
-- Sequential execution via pipes
-- Script-capture for analysis.
```

## 3 bash defines the following built-in commands:

```
: . [ alias bg bind break builtin caller case cd command compgen complete continue
declare dirs disown echo enable eval exec exit export false fc fg getopt hash help
history if jobs kill let local logout popd printf pushd pwd read readonly return set
shift shopt source suspend test times trap true type typeset ulimit umask unalias
unset until wait while
```

## 4 Starting a Terminal

- 1      CTRL + ALT + F2    or    CTRL + ALT + F3                [login console]
- 2      CTRL + ALT + T    [terminal emulator]
- 3      Applications -> Accessories -> Terminal            [terminal emulator]

## Further Assistance

For learning `bash` a very good book at every level of expertise is *A Practical Guide to Linux: Commands, Editors and Shell Programming* by Mark Sobell.

```
#!/bin/bash
# './explore' manuals for all linux commands in a random order so discover new ones

# define number of screen lines desired
let lines=20; [ ! -z "$1" ] && let lines=$1

# make a list of directories and thus commands
directories="/bin /sbin /usr/bin /usr/sbin /usr/local/bin"
commands=$(./bin/ls $directories|grep -v /)

# add builtins to list of commands
commands="$commands builtins"

# look at all commands in alphabetic order
echo $commands \
|tr ' \t' '\n' \
|grep -v "^[ \t]*$" \
|sort -u \
|tee explore.commands \
|tr '\n' ' ' \
|fold -s -w 80 \
|less

# generate random numbers for tagging commands
rm -f explore.random
for command in $(cat explore.commands)
do echo "$RANDOM $command">>>explore.random; done

# randomise the commands list
commands=$(cat explore.random|sort -n|awk '{print $2}')

# view the first $lines of each command in the list
for prog in $commands
do
    clear
    man $prog|col -b|grep -v "^[ \t]*$"|head -$lines
    echo
    read -p "q=quit, enter=next<" ans
    if [ "$ans" == "q" ]
    then
        break
    fi
done

echo
less $HOME/commands.list
echo "found $(cat explore.commands|wc -l) user commands"
exit 0
```

```
$ ./explore
[ 411toppm 7zr 822-date a2dismod a2dissite a2enmod a2ensite a2p a2ping
a2ps a2ps-lpr-wrapper a5booklet ab abiword abw2html accept accessdb
aclocal aclocal-1.7 aconnect acpi acpi_available acpid acpi_listen
addftinfo addgroup addpart addr2line add-shell adduser afm2tfm afmtodit
aide aideinit aide.wrapper akodeplay alacarte allcm allec allneeded
alsa alsaconf alsactl alsamixer alsamixer-gui alsaplayer amidi amixer
amuFormat.sh anacron analog animate anytopnm aoss apache2 apache2ctl
aplay aplaymidi apm_available appletproxy appres apropos aps2file
apsfilter-bug apsfilterconfig apspreview apt-cache apt-cdrom apt-config
apt-extracttemplates apt-ftparchive apt-get aptitude
aptitude-create-state-bundle aptitude-run-state-bundle apt-key apt-mark
apt-sortpkgs apt-spy ar arecord arecordmidi arj arjdisp arj-register
arm2hpdl arora arp arpd artscat artsdsp artsmessage artsplay
artsrec artsshell artswrapper as ascii-topgm ascii-xfr aseqdump aseqnet
asoundconf aspell aspell-autobuildhash aspell-import at atd atktopbm
atobm atq atrm audiocompose audiosend aumix autoconf autoheader
autom4te automake automake-1.7 autopoint autoreconf autoscan autoupdate
avahi-browse avahi-browse-domains avahi-daemon avahi-publish
avahi-publish-address avahi-publish-service avahi-resolve
avahi-resolve-address avahi-resolve-host-name avahi-set-host-name
avidemux avidemux2_gtk aviplay avr-addr2line avr-ar avr-as avr-c++
avr-c++filt avr-cpp avrdude avr-g++ avr-gcc avr-gcc-4.3.2 avr-gccbug
avr-gcov avr-gprof avr-ld avr-man avr-nm avr-objcopy avr-objdump
avr-ranlib avr-readelf avr-size avr-strings avr-strip awk axel b2m
b2m.emacs22 badblocks baobab base64 basename bash bashbug batch bbox bc
bdftopcf bdftops bftruncate beaver bibtex bibtex8 bioradtopgm
biosdecode bison bison.yacc bitmap blkid blockdev bluefish bmptopnm
bmptoppm bmptoa bootlogd brasero brctl brushtopbm bsd-mailx bsd-write
bsh btcflash btcompletedir btcompletedir.bittorrent btdownloadcurses
btdownloadcurses.bittorrent btdownloadheadless
btdownloadheadless.bittorrent btlaunchmany btlaunchmany.bittorrent
btlaunchmany.curses btlaunchmany.curses.bittorrent btmakemetafile
btmakemetafile.bittorrent btreannounce btreannounce.bittorrent btrename
btrename.bittorrent btshowmetainfo btshowmetainfo.bittorrent bttrack
bttrack.bittorrent buildhash builtins bunzip2 bzcat bzcmp bzdiff
bzegrep bzexe bzfgrep bzgrep bzip2 bzip2recover bzless bzmore c++ c2ph
c89 c89-gcc c99 c99-gcc cal calendar cancel capinfos captoinfo card cat
catchsegv catman cc ccmake cdparanoia cdrdao cfdisk c++filt chage
charmap chat chattr chcon check_forensic checkgid cheese cherokee
cherokee-admin cherokee-guardian cherokee-tweak chfn chgpasswd chgrp
chkdupe.xe chmod chown chpasswd chroot chrt chsh chvt ciptool cjpeg
cksum clambc clamscan claws-mail cleanup-info clear clear_console cli
cli-gacutil cli-wrapper cmake cmp cmuwmtopbm codepage col colcrt colrm
column combinediff comm compare comp_err compile_et compose
composeglyphs composite compress-dummy config_data conjure convert
corelist cp cpack cpan cpan2dist cpanp cpanp-run-perl cpgr cpio cpp
cpp-4.1 cpp-4.3 cppw cpufreq-info cpufreq-selector cpufreq-set
create-branching-keyboard c_rehash cron crontab csplit csslint-0.6
csv2vcard ctags.emacs22 ctangle ctest ctie ctrlaltdel ctstat
```

```
cupsaccept cupsaddsmb cups-calibrate cups-config cupsctl cupsd
cupsdconf cupsdisable cupsdprint cupsenable cupsfilter cups-genppd.5.0
cups-genppdconfig.5.0 cups-genppdupdate.5.0 cupsreject cupstestdsc
cupstestppd curl cut cvt cweave cytune daemon_wallpapoz dash dasher
date dbilogstrip dbiprof dbiproxy dbmmanage dbus-cleanup-sockets
dbus-daemon dbus-launch dbus-monitor dbus-send dbus-uuidgen dc
dcleanrcw dcfujigreen dcfujiturn dcfujiturn16 dcop dcopclient dcopfind
dcopobject dcopquit dcopref dcopserver dcopserver_shutdown dcopstart
dcparse dcraw dd ddate dealloctv debconf debconf-apt-progress
debconf-communicate debconf-copydb debconf-escape debconf-getlang
debconf-get-selections debconf-gettextize debconf-loadtemplate
debconf-mergetemplate debconf-set-selections debconf-show
debconf-updatepo debmirror debugfs defoma defoma-app defoma-font
defoma-hints defoma-id defoma-psfont-installer defoma-reconfigure
defoma-subst defoma-user dehtmdiff delgroup delpart deluser depmod
Desktop desktop-file-install desktop-file-validate detex detox devdump
dexconf df dfutool dh dh_auto_build dh_auto_clean dh_auto_configure
dh_auto_install dh_auto_test dh_bash-completion dh_builddeb dh_clean
dhclient dhclient3 dhclient-script dh_compress dhcpdc dhpcd-bin
dh_desktop dh_fixperms dh_gconf dh_gencontrol dh_gstscancodecs
dh_gtkmodules dh_icons dh_install dh_installcatalogs
dh_installchangelogs dh_installcron dh_installdeb dh_installdebconf
dh_installdefoma dh_installdirs dh_installdocs dh_installemacsen
dh_installexamples dh_installifupdown dh_installinfo dh_installinit
dh_installlogcheck dh_installlogrotate dh_installman dh_installmanpages
dh_installmenu dh_installmime dh_installmodules dh_installpam
dh_installppp dh_installtex dh_installudev dh_installwm
dh_installxfonts dh_installxmlcatalogs dh_link dh_lintian
dh_listpackages dh_makeshlibs dh_md5sums dh_movefiles dh_pangomodules
dh_perl dh_prep dh_pycentral dh_pysupport dh_python dh_scrollkeeper
dh_shlibdeps dh_strip dh_suidregister dh_testdir dh_testroot
dh_testversion dh_undocumented dh_usrlocal di dialog diff diff3 diffpp
dig dir dircolors directfb-config directfb-csource directomatic dirname
dirsplits display djpeg dmesg dmidecode dnsdomainname dosfsck dosfslabel
dotlockfile dpatch dpatch-convert-diffgz dpatch-cowdancer-patch
dpatch-edit-patch dpatch-get-origtarbz dpatch-list-patch dpkg
dpkg-architecture dpkg-buildpackage dpkg-checkbuilddeps dpkg-deb
dpkg-distaddfile dpkg-divert dpkg-genchanges dpkg-gencontrol
dpkg-gensymbols dpkg-name dpkg-parsechangelog dpkg-preconfigure
dpkg-query dpkg-reconfigure dpkg-scanpackages dpkg-scansources
dpkg-shlibdeps dpkg-source dpkg-split dpkg-statoverride dpkg-trigger
dprofpp drkonqi dt2dv du dumpcap dumpe2fs dumphint dumpkeys dumpreg
dumpsexp dund dv2dt dvd-ram-control dvd+rw-booktype dvd+rw-format
dvd+rw-mediainfo dvi2fax dvibook dviconcat dvicopy dvidvi dvigif dvihp
dvilj dvilj2p dvilj4 dvilj41 dvilj6 dvipdf dvipdfm dvipdfmx dvipdft
dvipng dvipos dvips dvired dviselect dvitodvi dvitype
dwell-click-applet e2fsck e2image e2label e2pall e2undo ebb ebrowse
ebrowse.emacs22 echo ed edit editcap editdiff editor editres egrep
eject ekiga ekiga-config-tool emacs emacs22 emacs22-x emacsclient
emacsclient.emacs22 enc2xs enchant enchant-lsmod enscript env envsubst
```

```
eog epiphany epiphany-browser epiphany-gecko eps2eps epsffit epstopdf  
eqn eqn2graph esdcat esdctl esddsp esdfilt esdloop esdmon esdplay  
esdrec esdsample espeak espeak-synthesis-driver etags etags.emacs22  
etex eventlogadm evince evince-thumbnailer evolution  
evolution-addressbook-export ex exicyclog exifautotran exigrep exim  
exim4 exim_checkaccess exim_convert4r4 exim_dbmbuild exim_dumpdb  
exim_fixdb exim_lock eximstats exim_tidydb exinext exipick exiqgrep  
exiqsumm exiwhat expand expect expiry expr extcompose extensionproxy  
extlinux extractbb extractres eyuvtoppm factor faillog faked-sysv  
faked-tcp fakeroott fakeroott-sysv fakeroott-tcp false famd fastjar  
fc-cache fc-cat fc-list fdformat fdisk festival  
festival_client festival-synthesis-driver fetchmail ffmpeg ffplay  
ffserver fgconsole fgrep fh-sync fiascotopnm filan file filefrag  
file-roller filesharelist fileshareset filterdiff find find2perl  
findaffix finds findsmb finger firefox fitstopnm fixcvsdiff fixdlsrps  
fixfmpls fixmacps fixnt fixps fixpsdtps fixpspps fixscribeps fixtpps  
fixwfwps fixwwps flashrom flipdiff flock fmt fmtutil  
fmtutil-sys fold font2c fontinst fonttosfnt foo2hp foo2hp2600-wrapper  
foo2lava foo2lava-wrapper foo2oak-wrapper foo2qpdl foo2qpdl-wrapper  
foo2xqx foo2xqx-wrapper foo2zjs foo2zjs-icc2ps foo2zjs-wrapper  
foomatic-addpjoptions foomatic-cleanupdrivers foomatic-combo-xml  
foomatic-compiledb foomatic-configure foomatic-datafile  
foomatic-extract-text foomatic-fix-xml foomatic-getpjoptions  
foomatic-gswrapper foomatic-kitload foomatic-nonnumericalids  
foomatic-perl-data foomatic-ppdfile foomatic-ppd-options  
foomatic-preferred-driver foomatic-printermap-to-gutenprint-xml  
foomatic-printjob foomatic-replaceoldprinterids foomatic-rip  
foomatic-searchprinter formail free freetype-config freshclam frbibdi  
from fsck fsck.cramfs fsck.ext2 fsck.ext3 fsck.ext4 fsck.ext4dev  
fsck.minix fsck.msdos fsck.nfs fsck.vfat fsfonts f-spot f-spot-import  
f-spot-sqlite-upgrade fstobdf fstopgm ftp funzip fuser g++ g3topbm  
g++-4.3 gacutil gamma4scanimage gawk gcalctool gcc gcc-4.1 gcc-4.3  
gccbug-4.1 gcj-dbtool-4.3 gconf-editor gconf-merge-tree gconf-schemas  
gconfsharp2-schemagen gconf tool gconf tool-2 gcov gcov-4.1 gcov-4.3  
gda-author-dict-file-3.0 gda-config-tool-3.0 gda-diagnose-3.0  
gda-inspect-dict-file-3.0 gda-list-config-3.0 gda-report-test-3.0  
gda-run-3.0 gda-test-connection-3.0 gdialog gdk-pixbuf-csource  
gdk-pixbuf-query-loaders gdm gdm-dmx-reconnect-proxy gdmdynamic  
gdmdflexiserver gdmphotosetup gdmsetup gdmthemester gdmXnest  
gdmXnestchooser gedit gemtopbm gemtopnm gencat gendiff genisoimage geqn  
GET getafm getconf geteltorito getent getfilename gethostip geticonset  
getkeycodes getnonfreefonts getnonfreefonts-sys getopt getstyle gettext  
gettextize gettext.sh getty getweb gfloppy gftodvi gftopk gftype ggtick  
ghostscript giftopnm gj-4.3 gimp gimp-2.4 gimp-console  
gimp-console-2.4 gimp-remote gimp-remote-2.4 ginstall-info gkeytool-4.3  
gksu gksudo gksu-properties glib-genmarshal glib-gettextize  
glib-mkenums gmenu-simple-editor gmplayer gnome-about gnome-about-me  
gnome-appearance-properties gnome-app-install gnome-app-install-helper  
gnome-at-mobility gnome-at-properties gnome-at-visual  
gnome-audio-profiles-properties gnome-calculator gnome-character-map
```

```
gnome-codec-install gnome-control-center
gnome-default-applications-properties gnome-desktop-item-edit
gnome-dictionary gnome-display-properties gnome-doc-prepare
gnome-doc-tool gnome-eject gnome-font-viewer gnome-help
gnome-keybinding-properties gnome-keyboard-properties
gnome-keyring-daemon gnome-mount gnome-mouse-properties gnome-nettool
gnome-network-preferences gnome-open gnome-panel gnome-panel-logout
gnome-panel-screenshot gnome-power-cmd gnome-power-manager
gnome-power-preferences gnome-power-statistics gnome-screensaver
gnome-screensaver-command gnome-screensaver-preferences
gnome-screenshot gnome-search-tool gnome-session
gnome-session-properties gnome-session-remove gnome-session-save
gnome-settings-daemon gnome-sound-properties gnome-sound-recorder
gnome-system-log gnome-system-monitor gnome-terminal
gnome-terminal.wrapper gnome-text-editor gnome-theme-thumbnailer
gnome-thumbnail-font gnome-typing-monitor gnome-umount gnomevfs-cat
gnomevfs-copy gnomevfs-df gnomevfs-info gnomevfs-ls gnomevfs-mkdir
gnomevfs-monitor gnomevfs-mv gnomevfs-rm gnome-video-thumbnailer
gnome-volume-control gnome-volume-manager-gthumb
gnome-volume-properties gnome-window-properties gnome-wm
gnome-www-browser gnumeric gnuplot gnuplot-nox gobject-query gok
gorbd-4.3 gouldtoppm gparted gpartedbin gpasm gpasswd gpdasm gpg
gpg-convert-from-106 gpg-error gpg-error-config gpgsplit gpgv gpg-zip
epic gplib gplink gprof gpstrip gpvc gpvc grep grep-changelog
grep-changelog.emacs22 grepdiff grepjar grmid-4.3 grmiregistry-4.3 grn
grodvi groff groffer grog grolbp grolj4 grops grotty groupadd groupdel
groupmod groups growisofs grpck grpconv grpunconv grub grub-floppy
grub-install grub-md5-crypt grub-mkdevicemap grub-probe grub-reboot
grub-set-default grub-terminal gs gsbj gsdj gsdj500 gserialver-4.3
gsftopk gslj gslp gsnd gss_clnt_send_err gss_destroy_creds gst-feedback
gst-feedback-0.10 gst-inspect gst-inspect-0.10 gst-launch
gst-launch-0.10 gstreamer-properties gst-typefind gst-typefind-0.10
gst-visualise-0.10 gst-xmlinspect gst-xmlinspect-0.10 gst-xmllaunch
gst-xmllaunch-0.10 gtbl gtester gtester-report gtf gthumb
gtk-builder-convert gtk-query-immodules-2.0 gtk-update-icon-cache
gucharmap guile guile-1.6 gunzip gv gvimtutor gv-update-userconfig
gxeditview gzexe gzip h2ph h2xs hald hal-device hal-disable-polling
hal-find-by-capability hal-find-by-property hal-get-property
hal-is-caller-locked-out hal-lock hal-set-property hal-setup-keymap
halt hardinfo hciattach hciconfig hcitool hd head HEAD helpztags
hexdump hid2hci hidd hipstopgm host hostid hostname hp-align hp-check
hp-clean hp-colorcal hp-fab hp-firmware hpftodit hp-info hp-levels
hplj1000 hplj1005 hplj1018 hplj1020 hp-makecopies hp-makeuri hp-print
hp-probe hp-scan hp-sendfax hp-setup hpssd hp-systray hp-testpage
hp-timedate hp-toolbox hp-unload hsqldb-databaseManager
hsqldb-databaseManagerswing hsqldb-querytool hsqldb-sqltool
hsqldb-transfer htcacheClean htdbm htdigest html2text httpasswd
htttx2dbm hwclock hwinfo i386 i486-linux-gnu-cpp i486-linux-gnu-cpp-4.1
i486-linux-gnu-cpp-4.3 i486-linux-gnu-g++ i486-linux-gnu-g++-4.3
i486-linux-gnu-gcc i486-linux-gnu-gcc-4.1 i486-linux-gnu-gcc-4.3
```

```
iceauth iceweasel icombine icontopbm iconv iconvconfig id identify
iecset ifconfig ifdown ifnames ifup igawk ijoin ilbmktoppm imagetops
imgtoppm imlib-config import includeres indxbib inetd info infobrowser
infocmp infokey infotocap init inkscape inkview innochecksum innontop
insmod inspectsocks install install-docs install-info installkernel
install-keymap install-menu install-sgmlcatalog instmodsh interdiff
intltool-extract intltoolize intltool-merge intltool-prepare
intltool-update invest-chart invoke-rc.d ionice ip ip6tables
ip6tables-restore ip6tables-save ipcrm ipcs ipmaddr iptables
iptables-apply iptables.init iptables-restore iptables-save
iptables-xml iptunnel isodump isoinfo isosize isovfy ispell
ispell-autobuildhash ispellconfig ispell-wrapper iwconfig ievent
iwgetid iwlist iwpriv iwspy jack jack_alias jack_bufsize jack_connect
jackd jack_disconnect jack_evmon jack_freewheel jack_impulse_grabber
jack_load jack_lsp jack.metro jack_midiseq jack_midisine
jack_monitor_client jackrec jack_showtime jack_simple_client
jack_transport jack_unload jar java javaws jexec join jpegexiforient
jpegtopnm jpegtran kab2kabc kabc2mutt kaccess kaddprinterwizard
kaddressbook kapplymousetheme kasbar kbd-config kbd_mode kbdrate
kblankscrn.kss kbookmarkmerger kbuildsyncoca kcheckpass kcheckrunning
kcminit kcminit_startup kcmshell kconf_update kcontrol kcookiejar kdcp
kdebugdialog kde-config kded kdeject kdeinit kdeinit_shutdown
kdeinit_wrapper kdeinstallktheme kde-menu kDepIDB kDepPre kdesktop
kdesktop_lock kdesu kdesu_stub kdialog kdontchangethehostname
kdostartupconfig keditbookmarks keditfiletype kerneloops
kerneloops-applet kernel-packageconfig keytool kfile kfind kfmclient
kfmexec kfontinst kfontview kgrantpty khotkeys khotnewstuff kicker kill
killall killall15 kinfocenter kinstalltheme kioexec
kio_http_cache_cleaner kio_media_mounthelper kioslave
kio_system_documenthelper kio_uiserver klauncher
klocaldomainurifilterhelper kmailservice kmk kmk_append kmk_ash kmk_cat
kmk_cmp kmk_cp kmk_echo kmk_gmake kmk_install kmk_ln kmk_md5sum
kmk_mkdir kmk_mv kmk_printf kmk_redirect kmk_rm kmk_rmdir kmk_sed
kmk_test knetattach kObjCache koi8rxterm konqueror kpac_dhcp_helper
kpseaccess kpsepath kpsereadlink kpsestat kpsetool kpsewhere kpsewhich
kpsexpand krandom.kss krandrtray krb5-config krdb kreadconfig
ksendbugmail kshell kstart kstartupconfig ksystraycmd ktelnetservice
ktradertest ktrash kwebdesktop kwrapper kwriteconfig kxkb l2ping
lacheck lame laptop-detect last lastb lastlog latex lavadecode lcf ld
ldconfig ldd leaftoppm less lessecho lessfile lesskey lesspipe lexgrog
lft lft.db lftp lftpget libgcrypt-config libglade-convert
libgnutls-config libgnutls-extra-config libgraphviz4-config-update
libnetcfg libpng12-config libpng-config libtasn1-config libtool
libtoolize liferea liferea-add-feed liferea-bin line link links links2
linux32 linux64 linux-boot-prober lispmtopgm listres lkbib ln lnstat
lnusertemp loadkeys loadunimap locale localedef locale-gen locate
lockfile lockfile-create lockfile-remove lockfile-touch logger login
logname logresolve logrotate logsave look lookbib lorder losetup lp
lpadmin lpc lpdomatic lpinfo lpmove lpoptions lppasswd lpq lpr lprm
lpr.orig lp_solve lpstat lrelease lrelease-qt3 ls lsattr lsb_release
```

```
lsdiff lshal lsmod lsof lspci lsgpot lss16toppm lsusb luit lupdate
lupdate-qt3 lwp-download lwp-mirror lwp-request lwp-rget lxterm lynx
lynx.cur lyx lyxclient lz lzcat lzma lzmainfo m16c-flash m4 m-a
macptopbm Magick-config Magick++-config MagickCore-config
MagickWand-config magnifier mail Mail mail-files mail-lock mailq
mailshar mailstat mailto mail-touchlock mail-unlock mailx make MAKEDEV
make_driver_db_cups make_driver_db_lpr make-googleearth-package
makeindex makeinfo make-kpkg make-ssl-cert makestrs man mandb manpath
mapscrn mattrib mautil mawk mbadblocks mbchk mcat mcd mcheck
mclasserase mcomp mcookie mcopy md5pass md5sum md5sum.textutils
mdatopbm mdel mdeltree mdir mdu meinproc mencoder mergecap mesg
metacity metacity-message metacity-theme-viewer metacity-window-demo
metamail metasend mf mf-nowin mformat mft mgrtopbm mii-tool mimeit
mimencode minfo minicom mkafmmap mkbimage mkboot mkdir mkdiskimage
mkdosfs mke2fs mkfifo mkfontdir mkfontscale mkfs mkfs.bfs mkfs.cramfs
mkfs.ext2 mkfs.ext3 mkfs.ext4 mkfs.ext4dev mkfs.minix mkfs.msdos
mkfs.vfat mkindex mkinitramfs mkinitramfs-kpkg mklost+found mkmanifest
mk_modmap mknod mkocp mkofm mkpasswd mksmbpasswd mksquashfs mkswap
mktemp mktexfmt mktexlsr mktexmf mktexpk mktextr fm mkzftree mlabel
mlocate mmd mmount mmove mmroff moc moc-qt3 mode3 modinfo modprobe
module-assistant mogrify mono montage more mount mount.nfs mount.nfs4
mountpoint mountro mountrw mousetweaks mozilla mozilla-firefox
mp3-decoder mpartition mpg123 mpg123-alsa mpg123.bin mpg123-esd
mpg123-nas mpg123-oss mpg123-oss-i486 mpg321 mplayer mrd mren msgattrib
msgcat msgcmp msgcomm msgconv msgen msgexec msgfilter msgfmt msggrep
msginit msgmerge msgunfmt msguniq mshowfat mysql2mysql mt mt-gnu mtools
mtoolstest mtr mtrace mtvtoppm mtype munchlist mute mutt mutt_dotlock
mv mxtar myisamchk myisam_ftdump myisamlog myisampack my_print_defaults
mysql mysqlaccess mysqladmin mysqlanalyze mysqlbinlog mysqlbug
mysqlcheck mysql_client_test mysql_client_test_embedded mysql_config
mysql_convert_table_format mysqld mysqld_multi mysqld_safe mysqldump
mysqldumpsslow mysql_explain_log mysql_find_rows mysql_fix_extensions
mysql_fix_privilege_tables mysqlhotcopy mysqlimport mysql_install_db
mysqlmanager mysqloptimize mysqlrepair mysqlreport
mysql_secure_installation mysql_setpermission mysqlshow mysql_tableinfo
mysqltest mysqltest_embedded mysqltestmanager mysqltestmanagerc
mysqltestmanager-pwgen mysql_tzinfo_to_sql mysql_upgrade
mysql_upgrade_shell mysql_waitpid mysql_zap mzip naim namei nameif nano
nautilus nautilus-cd-burner nautilus-connect-server
nautilus-file-management-properties nawk nc ncal nc.traditional
ncurses5-config ncursesw5-config ndb_config ndbd ndb_delete_all
ndb_desc ndb_drop_index ndb_drop_table ndb_error_reporter ndb_mgm
ndb_mgmd ndb_restore ndb_select_all ndb_select_count ndb_show_tables
ndb_size ndb_test_platform ndb_waiter neotoppm neqn nero nerocmd
neroexpress net netcat netkit-ftp netrik netscsid net-snmp-config
netstat network-admin newaliases newgrp newusers nfsstat ngettext nice
nicq nip2 nirc nl nlily nm nmap nmbd nmblookup nohup nologin nroff
nslookup nstat nsupdate ntpdate ntpdate-debian nxproxy obex-data-server
objcopy objdump oclock od ogg123 oggdec oggenc ogginfo ogonkify
oil-bugreport okidecode oldfind oldfuser omshell on_ac_power oobase
```

```
oocalc oodraw ooffice oofromtemplate ooimpress oomath ooweb oowriter
open openoffice openssl openssl-vulnkey openvt opldecode orbd orca
os-prober ots over ownership oxdvi p7zip pack200 pager palmtopnm pamcut
pamdeinterlace pamdice pamfile pam_getenv pamoil pamstack pamstretch
pamstretch-gen pam_tally pand panel-test-applets pango-querymodules
pango-view paps parsechangelog partx passwd paste pat2ppm patch
patch-metamail patextract patgen pathchk pbmclean pbmlife pbmmake
pbmmask pbmpage pbmpscale pbmreduce pbmtext pbmtextps pbmto10x
pbmtoascii pbmtoatk pbmtobbnbg pbmtocmuwm pbmtoepsi pbmtoepson pbmtog3
pbmtogem pbmtogo pbmtoicon pbmtolj pbmtomacp pbmtomda pbmtomgr
pbmtonokia pbmtopgm pbmtopi3 pbmtoplot pbmtoppa pbmtopsg3 pbmtoptx
pbmtowbmp pbmtox10bm pbmtoxbm pbmtoybm pbmtozinc pbmupc pcimodules
pcretest pcxtoppm pdb pdb2.5 pdredit pdf2dsc pdf2ps pdfclose pdfcrop
pdftex pdffonts pdfimages pdfinfo pdflatex pdfopen pdfopt pdftex
pdftoabw pdftohtml pdftoppm pdftops pdftotext pdiff pear peardev pecl
peekfd perl perl5.10.0 perlbug perldoc perlivp perror pf2afm pfstopfa
pfbtops pftp pg pgawk pgmbentley pgmcrater pgmedge pgmenhance pgmhist
pgmkernel pgmnoise pgmnorm pgmoil pgmramp pgmslice pgmtexture pgmtofs
pgmtolisp pgmtopbm pgmtoppm pgrep php php5 pi1toppm pi3topbm pic
pic2graph picasa picasm pico piconv pidof pilconvert.py pildriver.py
pilfile.py pilfont.py pilprint.py ping ping6 pinky pivot_root pjtoppm
pkfix pkg-config kill pktof pktype pl2pm planner play plipconfig plog
pma-configure pmap pmap_dump pmap_set pma-secure pm-hibernate
pm-is-supported pmount pmount-hal pm-powersave pm-suspend
pm-suspend-hybrid png2pat pngtopnm pnmalias pnmarith pnmcat pnmc colormap
pnmcrop pnmcconvol pnmcut pnmdensity pnmenlarge pnmcfile pnmcflip
pnmgamma pnmhisteq pnmhistmap pnmindex pnminerp pnminerp-gen
pnminvert pnmmargin pnmmontage pnmnlfilt pnmmoraw pnmmnorm pnmpad
pnmpaste pnmpsnnr pnmqnt pnmmrempn pnmmrotate pnmscale pnmscalefixed
pnmshear pnmsmooth pnmsplit pnmtile pnmtoddif pnmtofiasco pnmtofits
pnmtopjpeg pnmtopalm pnmtopplainpn pnmtopng pnmtops pnmtorast pnmtorle
pnmtosgi pnmtosir pnmtotiff pnmtotiffcmyk pnmtoxwd po2debconf pod2html
pod2latex pod2man pod2text pod2usage podchecker poddebconf-display-po
podebconf-report-po podselect poff poff.wvdial pointer-capture-applet
policytool polipo pon pon.wvdial pooltype popclient portmap POST poster
post-grohtml poweroff ppm3d ppmbrighten ppmchange ppmcie ppmcolormask
ppmcolors ppmdim ppmdist ppmdither ppmfade ppmflash ppmforge ppmhist
ppmlabel ppmmake ppmmix ppmnorm ppmntsc ppmpat ppmquant ppmquantall
ppmqvga ppmrainbow ppmrelief ppmshadow ppmshift ppmspread ppmtoacad
ppmtobmp ppmtoeyuv ppmtogif ppmtoicr ppmtoilbm ppmtojpeg ppmtoleaf
ppmtolj ppmtolss16 ppmtomap ppmtomitsu ppmtompeg ppmtoneo ppmtopcx
ppmtopgm ppmtopi1 ppmtopict ppmtopj ppmtopuzz ppmtorgb3 ppmtosixel
ppmtotga ppmtouil ppmtownicon ppmtoxpm ppmtoyuv ppmtouyvspli ppmtv
pppd pppdump pppoe-discovery pppstats pr precat pre-grohtml prename
preunzip prezzip prezzip-bin print printafm printenv printf procanc
procmail profiles prove ps ps2ascii ps2eps ps2epsi ps2pdf ps2pdf12
ps2pdf13 ps2pdf14 ps2pdfwr ps2ps ps2ps2 ps2txt ps4pdf psbook psed
psfaddtable psfgettable psfstriptable psfxtable psidtopgm pslatex
psmandup psmerge psnup psresize psselect psset pstopnm pstops pstree
pstree.x11 pstruct ptar ptardiff pt ked pt ksh ptx pumount pwck pwconv
```

```
pwd pwunconv pycentral py_compilefiles pydoc pydoc2.5 pygettext
pygettext2.5 pyntor pyntor-components pyntor-selfrun
pysupport-movemodules pysupport-parseversions python python2.5
pyversions qdbus qembed qiv qjackctl qmake qmake-qt3 qpdldecode
qrttoppm qtconfig qtconfig-qt4 qt-faststart qtnx querybts ramsize
ranlib rar rarian-example rarian-sk-config rarian-sk-extract
rarian-sk-gen-uuid rarian-sk-get-cl rarian-sk-get-content-list
rarian-sk-get-extended-content-list rarian-sk-get-scripts
rarian-sk-install rarian-sk-migrate rarian-sk-preinstall
rarian-sk-rebuild rarian-sk-update rarp rasttopnm raw rawshark rawtopgm
rawtoppm rb rbash rcp rcs-checkin rcs-checkin.emacs22 rdesktop rdev
rdjpgcom readelf readlink readom readprofile realplay realplayer rearj
reboot rebuild-gcj-db rebuild-security-providers rec recode-sr-latin
recordmydesktop recountdiff red rediff refer reject
remove-default-ispell remove-default-wordlist remove-shell remsync
rename rename.ul renice replace reportbug report-hw reset resize
resize2fs resolveip resolve_stack_dump restorefont restorepalette
restore.talk restoretextmode rev rfcomm rgb2pat rgb3toppm rgrep
rhd_conntest richtext rletopnm rlogin rm rmail rmdir rmid rmiregistry
rmmmod rmt rmt-tar rnano rootflags rotatelogs route routef routel
rpcclient rpcdebug rpcgen rpc.gssd rpc.idmapd rpcinfo rpc.statd rpl8
rpm rpm2cpio rpmbuild rpmdb rpme rpmgraph rpml rpmquery rpmsign rpmu
rpmverify rsh rsmtip rstart rstartd rsync rsyslogd rtacct rtcwake rtmon
rtstat runcon runlevel run-mailcap run-parts runq runscript
run-with-aspell rview rvim rx rz s2p s5 safe_finger saned
sane-find-scanner savelog saveme savetextmode saytime sb sbigtopgm
scanimage scp screen screendump script scriptreplay scrollkeeper-config
scrollkeeper-extract scrollkeeper-gen-seriesid scrollkeeper-get-cl
scrollkeeper-get-content-list scrollkeeper-get-extended-content-list
scrollkeeper-get-index-from-docpath scrollkeeper-get-toc-from-docpath
scrollkeeper-get-toc-from-id scrollkeeper-install
scrollkeeper-preinstall scrollkeeper-rebuilddb scrollkeeper-uninstall
scrollkeeper-update sdiff sdptool seahorse seahorse-agent
seahorse-daemon seahorse-preferences seahorse-tool sed see
select-default-ispell select-default-iwrap select-default-wordlist
sendmail sensible-browser sensible-editor sensible-pager seq serialver
servertool services-admin sessreg setarch setfont seticons setkeycodes
setleds setlogcons setmetamode setpci setsid setstyle setterm
setvesablank setxkbmap sdfdisk sftp sg sgtopnm sh sha1pass sha1sum
sha224sum sha256sum sha384sum sha512sum shadowconfig shar shares-admin
shasum showaudio showchar showconsolefont showexternal showfont showkey
showmount shownonascii showpartial showpicture showrgb shred shuf
shutdown sigtool simpdfex sirtopnm size skill slabtop slattach
sldtoppm sleep sliceprint slogin smartctl smartd smbcacls smbclient
smbcontrol smbcquotas smbd smbget smbpasswd smbpool smbstatus smbtar
smbtree smfpd smime_keys sm-notify smproxy snd snice snxdump snxterm
socat soelim soffice software-properties-gtk sort sound-juicer sox
spawn-fcgi spawn-fcgi.cherokee spctoppm speaker-test splain split
splitdiff splitfont split-logfile splitmail sprof sputoppm sq sqlite
sqlite3 ss ssconvert ssh ssh-add ssh-agent ssh-argv0 ssh-copy-id sshd
```

```
ssh-keygen ssh-keyscan ssh-vulnkey ssindex st4topgm start_kdeinit
start_kdeinit_wrapper startpar start-stop-daemon startx stat states
store.talk stream strings strip stty su sudo sudoedit slogin sum
su-to-root svgakeymap svlc svn svnadmin svndumpfilter svnlook svnmucc
svn-populate-node-origins-index svnserve svnsync svnversion swapoff
swapon swfdec-player swfdec-thumbnailer sx sylpheed sylpheed-claws-gtk2
synaptic sync synclient syndaemon sysctl syslinux syslinux2ansi
syslog2eximlog system-tools-backends sysv-rc-conf sz tabs tac tail
tailf tangle tar taskjuggler TaskJugglerUI tasksel taskset tasm tbl tc
tcdialog tclsh tclsh8.4 tclsh8.5 tcpd tcpdchk tcpdmatch tcpdump
tcptraceroute tcptraceroute.db tdbbackup tee telinit telnet
telnet.netkit tempfile test testparm tex tex2lyx texconfig
texconfig-dialog texconfig-sys texdoc texdoctk texhash texi2dvi
texi2dvi4a2ps texi2pdf texindex texlinks text2pcap text2wave textmode
tfmtodit tcatoppm tgz themus-theme-applier thinkjettopbm thumbpdf tic
tie tifftopnm time time-admin tixindex tkjpeg tload tnameserv toc2cddb
toc2cue toe toolame top tor tor-gencert torify tor-resolve totem
totem-audio-preview totem-gstreamer totem-gstreamer-audio-preview
totem-gstreamer-video-indexer totem-gstreamer-video-thumbnailer
totem-video-indexer touch tpic2pdftex tput tr traceproto traceproto.db
traceroute traceroute6 traceroute6.db traceroute.db traceroute-nanog
traceroute-nanog.db tracert tracert.db troff true tryaffix try-from
tsclient tset tsocks tsort tty tune2fs tunelp twm tzconfig tzselect ucf
ucfq ucfr ucs2any udevadm udevinfo udevsettle uic uic-qt3 ul
umax_pp umount umount.hal umount.nfs umount.nfs4 uname
unattended-upgrade uncompress unexpand unicode_start unicode_stop uniq
unix_chkpwd unix_update unlink unlzma unopkg unpack200 unrar
unrar-nonfree unshar unsq unsquashfs unwrapdiff unxz unzip unzipsfx
update-aide.conf update-alternatives update-app-install
update-auctex-elisp update-auctex-install update-binfmts
update-ca-certificates update-catalog updatedb updatedb.mlocate
update-default-aspell update-default-ispell update-default-wordlist
update-desktop-database update-dictcommon-aspell update-exim4.conf
update-exim4.conf.template update-exim4defaults update-fmtutil
update-fontlang update-fonts-alias update-fonts-dir update-fonts-scale
update-gconf-defaults update-gdkpixbuf-loaders update-grub
update-gtk-immodules update-icon-caches update-inetd update-initramfs
update-ispell-dictionary update-java-alternatives update-language
update-locale update-manager update-menus update-mime
update-mime-database update-modules update-notifier
update-openoffice-dicts update-pangox-aliases update-passwd
update-pciids update-perl-sax-parsers update-python-modules update-rc.d
update-texmf update-updmap update-usbids update-xmlcatalog
update-xpdfrc updmap updmap-sys upgrade-windowmaker-defaults uptime
usb_printerid useradd userdel usermod users users-admin uudecode
uuencode uuencode uxterm uz validateconf validlocale vbetool
VBoxAddIF VBoxDeleteIF vboxheadless VBoxHeadless vboxmanage VBoxManage
vboxsdl VBoxSDL VBoxTAP VBoxTunctl vcstime vcut vdir vdtool vga_reset
vi vidmode view viewres vigr vim vim.basic vimdiff vim.tiny vimtutor
vinagre vino-preferences vipw virtualbox VirtualBox visgrep visudo vlc
```

```

vmstat vnc4config vnc4passwd vnc4server vncconfig vncpasswd vncserver
vncviewer vol_id volname vorbiscomment vorbistagedit vpddecode vpe
vrflash vumeter w w3m w3mman wall wallpapoz Wand-config watch wbmpstopbm
wc wdiff wdread wdwrite weave weblint wftopfa wget whatis whereis which
whiptail who whoami whois wicd wicd-client wicd-curses widget
WindowMaker winicontoppm wipe wireshark wmagnify wmaker wmsetbg wodim
word-list-compress wpa_action wpa_cli wpa_passphrase wpa_supplicant
WPrefs w.procps write wrjpcgcom wvdial wvdialconf www-browser wxcopy
wxpaste wxvlc X x0vnc4server x0vncserver X11 x11perf x11perfcomp x11vnc
xargs xau mix xauth xbiff xbmtopbm xbsh xcalc xclipboard xclock xcmsdb
xconsole xcursorgen xcutsel xdg-desktop-icon xdg-desktop-menu xdg-email
xdg-icon-resource xdg-mime xdg-open xdg-screensaver xditview xdpyinfo
xdriinfo xdvi xdvi.bin xdvi-xaw.bin xephem xev xeyes xfd xfe xfileimage
xfilepackage xfilequery xfileview xfilewriter xfontsel xfsinfo
xft-config xgamma xgc xgettext xhost ximtoppm xinit xinput xkbell
xkbcomp xkbevd xkbprint xkbvleds xkbwatch xkill xlinks2 xload xlogo
xlsatoms xlsclients xlsfonts xmag xman xmessage xminicom xml2-config
xml2po xmllcatalog xmllint xmodmap xmore xmousepos Xorg xournal xpaint
xpdf xpdf.bin xpmtoppm xprop xqxdccode xrandr xrdb xrefresh xsane
x-session-manager xset xsetmode xsetpointer xsetroot xsltproc xsm
xstdcmap xsubpp xte xterm x-terminal-emulator xtrapchar xtrapin
xtrapinfo xtrapout xtrapproto xtrapreset xtrapstats xulrunner-1.9
xvidtune xvinfo xvminitoppm Xvnc Xvnc4 xvnc4viewer xvncviewer xwd
xwdtopnm x-window-manager xwininfo xwud x-www-browser xxd xz xzcat
xzcmp xzdiff xzegrep xzfgrep xzgv xzless xzmore yacc yasm
ybmtopbm yelp yes youtube-dl yuvsplitoppm yuvtoppm zcat zcmp zdiff
zdump zegrep zeisstopnm zenity zfgrep zforce zgrep zic zip zipcloak
zipgrep zipinfo zipnote zipsplit zjsdecode zless zmore znew zsoelim
zpdf

```

<code>ogginfo(1)</code>	<code>Vorbis Tools</code>	<code>ogginfo(1)</code>
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#### NAME

`ogginfo` - gives information about Ogg files, and does extensive validity checking

#### SYNOPSIS

`ogginfo [ -q ] [ -v ] [ -h ] file1.ogg ... fileN.ogg`

#### DESCRIPTION

`ogginfo` reads one or more Ogg files and prints information about stream contents (including chained and/or multiplexed streams) to standard output. It will detect (but not correct) a wide range of common defects, with many additional checks specifically for Ogg Vorbis streams.

For all stream types `ogginfo` will print the filename being processed, the stream serial numbers, and various common error conditions.

For Vorbis streams, information including the version used for encoding, the sample rate and number of channels, the bitrate and playback length, and the contents of the comment header are printed.

Similarly, for Theora streams, basic information about the video is provided, including frame rate, aspect ratio, bitrate, length, and the comment header.

```
q=quit, enter=next<q

411toppm - convert Sony Mavica .411 image to ppm
7zr - A file archiver with highest compression ratio
822-date - Print date and time in RFC2822 format
a2enmod, a2dismod - enable or disable an apache2 module
a2ensite, a2dissite - enable or disable an apache2 site / virtual host
a2p - Awk to Perl translator
a2ping -- convert between PS, EPS and PDF and other page description formats
a2ps - format files for printing on a PostScript printer
a2ps-lpr-wrapper lp/lpr wrapper script for GNU a2ps on Debian
a5booklet - copy two A5 pages from a .dvi file to one A4 page in
ab - Apache HTTP server benchmarking tool
AbiWord - AbiWord Word Processor
abw2html - Abiword to HTML converter
accept/reject - accept/reject jobs sent to a destination
accessdb - dumps the content of a man-db database in a human readable
aclocal - automatically generate aclocal.m4 from configure.in
aconnect - ALSA sequencer connection manager
acpi_available - test whether ACPI subsystem is available
acpid - Advanced Configuration and Power Interface event daemon
acpi_listen - ACPI event listener
acpi - Shows battery status and other ACPI information
addftinfo - add information to troff font files for use with groff
addpart - simple wrapper around the "add partition" ioctl
addr2line - convert addresses into file names and line numbers.
add-shell - add shells to the list of valid login shells
adduser, addgroup - add a user or group to the system
afm2tfm - convert Adobe font metrics to TeX font metrics
afmtodit - create font files for use with groff -Tps
agetty - alternative Linux getty
aide - Advanced Intrusion Detection Environment
aideinit - create a new AIDE database
aide.wrapper - call aide binary for Debian mechanisms
alacarte - edit freedesktop.org menus
allcm - force the most important Computer-Modern-fonts to be calculated
allneeded - force the calculation of all fonts now needed
alsaconf - configuration tool for the Advanced Linux Sound Architecture
alsactl - advanced controls for ALSA soundcard driver
alsamixer - soundcard mixer for ALSA soundcard driver, with ncurses
amidi - read from and write to ALSA RawMIDI ports
amixer - command-line mixer for ALSA soundcard driver
anacron - runs commands periodically
analog - web server logfile analyser
animate - animates an image or image sequence on any X server.
anytopnm - attempt to convert an unknown type of image file to a
apache2 - Apache Hypertext Transfer Protocol Server
apache2ctl - Apache HTTP server control interface
aplaymidi - play Standard MIDI Files
```

```
apm_available - test whether APM subsystem is available
appletproxy - KDE kicker panel applet proxy
appres - list X application resource database
apropos - search the manual page names and descriptions
aps2file - printing to a file via apsfilter
apsfilter-bug - create a half-automatic bug report for apsfilter
apsfilter - magic print filter with auto file type recognition
apspreview - preview PostScript file(s) as generated by apsfilter
apt-cache - APT package handling utility -- cache manipulator
apt-cdrom - APT CDROM management utility
apt-config - APT Configuration Query program
apt-extracttemplates - Utility to extract DebConf config and templates
apt-ftparchive - Utility to generate index files
apt-get - APT package handling utility -- command-line interface
aptitude-create-state-bundle - bundle the current aptitude state
aptitude - high-level interface to the package manager
aptitude-run-state-bundle - unpack an aptitude state bundle and invoke
apt-key - APT key management utility
apt-mark - mark/unmark a package as being automatically-installed
apt-sortpkgs - Utility to sort package index files
apt-spy - program to generate a /etc/apt/sources.list file
ar - create, modify, and extract from archives
arecord, aplay - command-line sound recorder and player for ALSA sound
arecordmidi - record Standard MIDI Files
arj - Archiver for .arj files
arjdisp - ARJ simple graphical interface
arj-register - Register the ARJ archiver
arm2hpdl - part of the printer driver foo2zjs
Arora - Lightweight web browser based on Qt and WebKit
arpd - userspace arp daemon.
arp - manipulate the system ARP cache
artschat pipe data to sound device
artsdsp - manual page for artsdsp
artsmessages Utility to display aRts error messages
asciitopgm - convert ASCII graphics into a portable graymap
ascii-xfr - upload/download files using the ASCII protocol
aseqdump - show the events received at an ALSA sequencer port
aseqnet - ALSA sequencer connectors over network
asoundconf - utility to read and change the users ALSA library config
aspell-autobuildhash - Autobuilding aspell hash files for some dicts
aspell-import - import old personal dictionaries into GNU Aspell
aspell - interactive spell checker
AS - the portable GNU assembler.
at, batch, atq, atrm - queue, examine or delete jobs for later execution
atd - run jobs queued for later execution
atktopbm - convert Andrew Toolkit raster object to portable bitmap
audiocompose - Compose an audio fragment for inclusion in a mail message
audiosend - Send an audio email message
aumix - adjust audio mixer
autoconf - Generate configuration scripts
```

autoheader - Create a template header for configure  
autom4te - Generate files and scripts thanks to M4  
automake - automatically create Makefile.ins from Makefile.ams  
autopoint - copies standard gettext infrastructure  
autoreconf - Update generated configuration files  
autoscan - Generate a preliminary configure.in  
autoupdate - Update a configure.in to a newer Autoconf  
avahi-browse - Browse for mDNS/DNS-SD services using the Avahi daemon  
avahi-daemon - The Avahi mDNS/DNS-SD daemon  
avahi-publish-service - Register an mDNS/DNS-SD service or host name or  
avahi-resolve - Resolve one or more mDNS/DNS host name(s) to IP  
avahi-set-host-name - Change mDNS host name  
Avidemux a free video editor  
aviplay - QT-based movie player  
avrduude - driver program for simple Atmel AVR MCU programmer  
badblocks - search a device for bad blocks  
Baobab - A graphical tool to analyse disk usage  
base64 - base64 encode/decode data and print to standard output  
basename - strip directory and suffix from filenames  
bashbug - report a bug in bash  
bash-builtins - bash built-in commands, see bash(1)  
bash - GNU Bourne-Again SHell  
bbox - prints out the bounding box of a rawppm or rawpbm image  
bc - An arbitrary precision calculator language  
bdftopcf - convert X font from Bitmap Distribution Format to Portable  
bdftruncate - generate truncated BDF font from ISO 10646-1-encoded BDF  
beaver - an advanced editor based on GTK+ libraries.  
bibtex8 - 8-bit Big BibTeX version 0.99c  
bibtex - make a bibliography for (La)TeX  
bioradtopgm - convert a Biorad confocal file into a portable graymap  
biosdecode - BIOS information decoder  
bison - GNU Project parser generator (yacc replacement)  
bison.yacc - GNU Project parser generator (yacc replacement)  
bitmap, bmtoa, atobm - bitmap editor and converter utilities for the X  
blkid - command-line utility to locate/print block device attributes  
blockdev - call block device ioctls from the command line  
bmptopnm - convert a BMP file into a portable anymap  
bootlogd - record boot messages  
brasero - Simple and easy to use CD/DVD burning application for the  
brushtopbm - convert a doodle brush file into a portable bitmap  
bsh - BeanShell: A Java scripting environment (command-line version).  
BTCFLASH - firmware flash utility for BTC DRW1008 DVD+/-RW recorder.  
bzcmp, bzdiff - compare bzip2 compressed files  
bzexe - compress executable files in place  
bzgrep, bzfgrep, bzegrep - search possibly bzip2 compressed files for a  
bzip2, bunzip2 - a block-sorting file compressor, v1.0.4  
bzmore, bzless - file perusal filter for crt viewing of bzip2 com  
c2ph, pstruct - Dump C structures as generated from "cc -g -S" stabs  
c89 - ANSI (1989) C compiler  
c99 - ANSI (1999) C compiler

```
calendar - reminder service
cal, ncal - displays a calendar and the date of easter
cancel - cancel jobs
captoinfo - convert a termcap description into a terminfo description
card - print reference card of program options
catchsegv - Catch segmentation faults in programs
cat - concatenate files and print on the standard output
catman - create or update the pre-formatted manual pages
cdparanoia - an audio CD reading utility which includes extra data ver
cdrdao - reads and writes CDs in disc-at-once mode
cfdisk - Curses/slang based disk partition table manipulator for Linux
c++filt - Demangle C++ and Java symbols.
chage - change user password expiry information
charmap - character symbols to define character encodings
charset - Set an ACM for use in one of the G0/G1 charset slots.
chat - Automated conversational script with a modem
chattr - change file attributes on a Linux second extended file system
chcon - change file security context
check_forensic - tool to extract mod_log_forensic output from apache
checkgid - checks the gid
cheese - A tool to take pictures and videos from your webcam
cherokee-admin - Runs Cherokees administrative interface
cherokee - Cherokee web server
cherokee-guardian - Cherokee web server safe invoker
cherokee_tweak - Command-line interface to the Cherokee administrative
chfn - change real user name and information
chpasswd - update group passwords in batch mode
chgrp - change group ownership
chkdupexe - find duplicate executables
chmod - change file mode bits
chown - change file owner and group
chpasswd - update passwords in batch mode
chroot - run command or interactive shell with special root directory
chrt - manipulate real-time attributes of a process
chsh - change login shell
chvt - change foreground virtual terminal
cjpeg - compress an image file to a JPEG file
cksum - checksum and count the bytes in a file
clambc - Bytecode Testing Tool
clamscan - scan files and directories for viruses
Claws Mail - a GTK+ based fast email and news client
cleanup-info - clean up the mess that bogus install-info may have done
clear - clear the terminal screen
clear_console - clear the console
cmp - compare two files byte by byte
cmuwmtopbm - convert a CMU window manager bitmap into a portable bitmap
codepage - extract a codepage from an MSDOS codepage file
colcrt - filter nroff output for CRT previewing
col - filter reverse line feeds from input
colrm - remove columns from a file
```

column - columnate lists  
combinediff - create a cumulative unified patch from two incremental  
comm - compare two sorted files line by line  
compare - mathematically and visually annotate the difference between  
comp\_err - compile MySQL error message file  
compile\_et - error table compiler  
composeglyphs - generate an encoding vector or new font for postscript  
composite - overlaps one image over another.  
compress-dummy - manual page for compress-dummy - sharutils 4.6.3  
config\_data - Query or change configuration of Perl modules  
conjure - interprets and executes scripts written in the Magick Script  
consolechars - load EGA/VGA console screen font, screen-font map,  
convert - convert between image formats as well as resize an image,  
corelist - a commandline frontend to Module::CoreList  
cpan2dist - The CPANPLUS distribution creator  
cpan - easily interact with CPAN from the command line  
cpanp - The CPANPLUS launcher  
cp - copy files and directories  
cpio - copy files to and from archives  
cppw, cpgr - copy with locking the given file to the password or group  
cpufreq-info - Utility to retrieve cpufreq kernel information  
cpufreq-selector - tool to set CPU frequency  
cpufreq-set - A small tool which allows to modify cpufreq settings.  
c\_rehash - Create symbolic links to files named by the hash values  
cron - daemon to execute scheduled commands (Vixie Cron)  
crontab - maintain crontab files for individual users (V3)  
csplit - split a file into sections determined by context lines  
csv2vcard - Convert a CSV-formatted list of contacts to vCards  
ctangle, cweave - translate CWEB to C and/or TeX  
ctie - merge or apply CWEB change files  
ctrlaltdel - set the function of the Ctrl-Alt-Del combination  
cupsaddsmb - export printers to samba for windows clients  
cups-calibrate - ESP CUPS Printer Calibration Tool  
cups-config - get cups api, compiler, directory, and link information.  
cupsctl - configure cupsd.conf options  
cupsd - common unix printing system daemon  
cupsdconf A CUPS configuration tool  
cupsdisable, cupsenable - stop/start printers and classes  
cupsdoprint - KDE command line tool to print files via CUPS  
cupsfilter - convert a file to another format using cups filters  
cups-genppdconfig - a user-friendly interface to generate Gutenprint  
cups-genppd - generate Gutenprint PPD files for use with CUPS  
cups-genppdupdate - update CUPS+Gutenprint PPD files  
cupsprofile - cups simple profiling tool  
cupstestdsc - test conformance of postscript files  
cupstestppd - test conformance of ppd files  
cut - remove sections from each line of files  
cvt - calculate VESA CVT mode lines  
cytune - Tune driver parameters for Cyclades-Z multiport serial card  
dasher - graphical predictive text entry system

date - print or set the system date and time  
dbilogstrip - filter to normalize DBI trace logs for diffing  
dbiprof - command-line client for DBI::ProfileData  
dbiproxy - A proxy server for the DBD::Proxy driver  
dbmmanage - Manage user authentication files in DBM format  
dbus-cleanupsockets - clean up leftover sockets in a directory  
dbus-daemon - Message bus daemon  
dbus-launch - Utility to start a message bus from a shell script  
dbus-monitor - debug probe to print message bus messages  
dbus-send - Send a message to a message bus  
dbus-uuidgen - Utility to generate UUIDs  
dc - an arbitrary precision calculator  
dcleanrcw - Canon (CRW) RAW photo file recovery utility  
dcfujigreen - Alternative processing for Fuji RAW images  
dcfujiturn/dcfujiturn16 - Alternative rotation for dcraw processed  
dcopclient - extracts the application id from a DCOP reference of a KDE  
dcop Console DCOP client  
dcopfind Find the DCOP reference of a KDE service  
dcopobject - extracts the object id from a DCOP reference of a KDE ser  
dcopquit - terminates a KDE service  
dcopref - creates a DCOP reference of a KDE service from application id  
dcopserver KDE DCOP server  
dcopserver\_shutdown - shuts down the KDE DCOP service  
dcopstart Start a KDE service and return its DCOP reference  
dcparse - Extract embeded thumbnail image and print CIFF/TIFF data to  
dcraw - command-line decoder for raw digital photos  
ddate - converts Gregorian dates to Discordian dates  
dd - convert and copy a file  
deallocvt - deallocate unused virtual terminals  
debconf-apt-progress - install packages using debconf to display a  
debconf-communicate - communicate with debconf  
debconf-copydb - copy a debconf database  
debconf-escape - helper when working with debconfs escape capability  
debconf-gettextize - extract translations of debconf templates into PO  
debconf - run a debconf-using program  
debconf-set-selections - insert new default values into the debconf  
debconf-show - query the debconf database  
debconf-updatedo - update PO files about debconf templates  
debmirror - Debian partial mirror script, with ftp, http, hftp or rsync  
debugfs - ext2/ext3 file system debugger  
defoma-app - configure a specific application about fonts registered in  
defoma - Debian Font Manager, a framework for automatic font configura  
defoma-font - register/unregister font(s) to Debian Font Manager  
defoma-hints - generate font hints.  
defoma-id - Manage id-cache of Debian Font Manager  
defoma-psfont-installer - register fonts installed in a PostScript  
defoma-reconfigure - Reconfigure all from zero.  
defoma-subst - Modify a rulefile of Defoma font substitution system.  
defoma-user - Debian Font Manager for users  
dehtmlldiff - get usable diff from an HTML page

delpart - simple wrapper around the "del partition" ioctl  
deluser, delgroup - remove a user or group from the system  
depmod program to generate modules.dep and map files.  
desktop-file-install - install a desktop file to the applications  
desktop-file-validate - validate a .desktop file  
detex - a filter to strip TeX commands from a .tex file.  
detox - clean up filenames  
devdump, isoinfo, isovfy, isodump - Utility programs for dumping and  
dexconf - generate Xorg X server configuration file from debconf data  
df - report file system disk space usage  
dh\_auto\_build - automatically builds a package  
dh\_auto\_clean - automatically cleans up after a build  
dh\_auto\_configure - automatically configure a package prior to building  
dh\_auto\_install - automatically runs make install or similar  
dh\_auto\_test - automatically runs a packages test suites  
dh\_bash-completion - install bash completions for package  
dh\_builddeb - build debian binary packages  
dh\_clean - clean up package build directories  
dhclient - Dynamic Host Configuration Protocol Client  
dhclient-script - DHCP client network configuration script  
dh\_compress - compress files and fix symlinks in package build  
dhcpcd - an RFC 2131 compliant DHCP client  
dhcpcd - a wrapper for the DHCP client daemon.  
dh - debhelper command sequencer  
dh\_desktop - Register .desktop files  
dh\_fixperms - fix permissions of files in package build directories  
dh\_gconf - generate GConf schema registration scripts  
dh\_gencontrol - generate and install control file  
dh\_gtkmodules - create Gtk module files for Gtk modules  
dh\_icons - Update Freedesktop icon caches  
dh\_installcatalogs - install and register SGML Catalogs  
dh\_installchangelogs - install changelogs into package build  
dh\_installcron - install cron scripts into etc/cron.\*  
dh\_installdebconf - install files used by debconf in package build  
dh\_installdeb - install files into the DEBIAN directory  
dh\_installdefoma - install a defoma related scripts  
dh\_installdirs - create subdirectories in package build directories  
dh\_installdocs - install documentation into package build directories  
dh\_installemacsen - register an emacs add on package  
dh\_installexamples - install example files into package build  
dh\_installifupdown - install if-up and if-down hooks  
dh\_installinfo - install and register info files  
dh\_installinit - install init scripts into package build directories  
dh\_install - install files into package build directories  
dh\_installlogcheck - install logcheck rulefiles into etc/logcheck/  
dh\_installlogrotate - install logrotate config files  
dh\_installman - install man pages into package build directories  
dh\_installmanpages - old-style man page installer  
dh\_installmenu - install debian menu files into package build  
dh\_installmime - install mime files into package build directories

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dh_installmodules - register modules with modutils
dh_installpam - install pam support files
dh_installppp - install ppp ip-up and ip-down files
dh_installtex - register Type 1 fonts, languages, or formats with TeX
dh_installudev - install udev rules files
dh_installwm - register a window manager
dh_installxfonts - register X fonts
dh_installxmlcatalogs - install and register XML catalog files
dh_link - create symlinks in package build directories
dh_lintian - install lintian override files into package build
dh_listpackages - list binary packages debhelper will act on
dh_makeshlibs - automatically create shlibs file and call
dh_md5sums - generate DEBIAN/md5sums file
dh_movefiles - move files out of debian/tmp into subpackages
dh_pangomodules - create a Pango Module file for all Pango modules
dh_perl - calculates perl dependencies and cleans up after MakeMaker
dh_prep - perform cleanups in preparation for building a binary package
dh_pycentral - use the python-central framework to handle Python
dh_pysupport - use the python-support framework to handle Python
dh_python - calculates python dependencies and adds postinst and prerm
dh_scrollkeeper - generate ScrollKeeper registration scripts
dh_shlibdeps - calculate shared library dependencies
dh_strip - strip executables, shared libraries, and some static
dh_suidregister - obsolete suid registration program
dh_testdir - test directory before building debian package
dh_testroot - ensure that a package is built as root
dh_testversion - ensure that the correct version of debhelper is
dh_undocumented - obsolete undocumented.7 symlink program
dh_usrlocal - migrate usr/local directories to maintainer scripts
diagnostics, splain - produce verbose warning diagnostics
dialog - display dialog boxes from shell scripts
diff3 - compare three files line by line
diff - compare files line by line
diffpp - pretty-print diff outputs with GNU enscript
dig - DNS lookup utility
dircolors - color setup for ls
directfb-config - script to get information about the installed version
directfb-csource - C code generation utility for DirectFB surfaces
dir - list directory contents
dirname - strip non-directory suffix from file name
dirsplits - splits directory into multiple with equal size
display - displays an image or image sequence on any X server.
djipeg - decompress a JPEG file to an image file
dmesg - print or control the kernel ring buffer
dmidecode - DMI table decoder
dosfsck - check and repair MS-DOS file systems
dosfslabel - set or get a MS-DOS filesystem label
dotlockfile - Utility to manage lockfiles
dpatch-convert-difffgz - Convert a debian .diff.gz to a dpatch file
dpatch-edit-patch - maintain dpatch patches for a Debian source package
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dpatch-get-origtargz - Obtain upstream tarball
dpatch-list-patch - List available patches
dpatch - patch maintenance system for Debian
dpkg-architecture - set and determine the architecture for package
dpkg-buildpackage - build binary or source packages from sources
dpkg-checkbuilddeps - check build dependencies and conflicts
dpkg-deb - Debian package archive (.deb) manipulation tool
dpkg-distaddfile - add entries to debian/files
dpkg-divert - override a packages version of a file
dpkg-genchanges - generate Debian .changes files
dpkg-gencontrol - generate Debian control files
dpkg-gensymbols - generate symbols files (shared library dependency)
dpkg-name - rename Debian packages to full package names
dpkg - package manager for Debian
dpkg-parsechangelog - parse Debian changelog files
dpkg-preconfigure - let packages ask questions prior to their
dpkg-query - a tool to query the dpkg database
dpkg-reconfigure - reconfigure an already installed package
dpkg-scanpackages - create Packages index files
dpkg-scansources - create Sources index files
dpkg-shlibdeps - generate shared library substvar dependencies
dpkg-source - Debian source package (.dsc) manipulation tool
dpkg-split - Debian package archive split/join tool
dpkg-statoverride - override ownership and mode of files
dpkg-trigger - a package trigger utility
dprofpp - display perl profile data
drkonqi - KDE crash handler gives the user feedback if a program
dt2dv - convert a DTL text representation of a TeX DVI file to a binary
du - estimate file space usage
dump2fs - dump ext2/ext3 filesystem information
dumpkeys - dump keyboard translation tables
dumpsexp - Debug tool for S-expressions
dv2dt - convert a binary TeX DVI file to DTL text representation
dvd+rw-booktype - format DVD+-RW/-RAM disk with a logical format
dvd+rw-format - format DVD+-RW/-RAM disk
dvd+rw-mediainfo - display information about dvd drive and disk
dvi2fax - convert a TeX DVI file to G3 fax format
dvibook - rearrange pages in DVI file into signatures
dviconcat - concatenate DVI files
dvicopy - produce modified copy of DVI file
dvidvi - selects and/or re-arranges pages in a TeX dvi file
dvihp - convert a TeX DVI file to Hewlett-Packard PCL
dvilj4, dvilj4l, dvilj2p, dvilj - convert a TeX DVI file to PCL, for HP
dvipdf - Convert TeX DVI file to PDF using ghostscript and dvips
dvipdfm - Produce PDF files directly from DVI files
dvipdft - create thumbnail images for use with dvipdfm
dvipos - compute positions in a DVI file
dvips - convert a TeX DVI file to PostScript
dvired - print dvi-files
dviselect - extract pages from DVI files
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dvitodvi - rearrange pages in a DVI file  
dvitype - translate a dvi file for humans  
dwell-click-applet - Useful to select click type when using dwell click  
e2fsck - check a Linux ext2/ext3 file system  
e2image - Save critical ext2/ext3 filesystem metadata to a file  
e2label - Change the label on an ext2/ext3 filesystem  
e2pall - convert all EPS files in a LaTeX document to PDF  
e2undo - Replay an undo log for an ext2/ext3/ext4 filesystem  
ebb - extract a bounding box from JPEG, PNG, and PDF files  
echo - display a line of text  
editres - a dynamic resource editor for X Toolkit applications  
ed, red - text editor  
eject - eject removable media  
ekiga-config-tool - Ekiga GConf Setup Configuration Assistant.  
Ekiga - SIP and H.323 Voice over IP and Videoconferencing for UN\*X  
emacsclient - tells a running Emacs to visit a file  
emacs - GNU project Emacs  
enc2xs -- Perl Encode Module Generator  
Enchant - a spellchecker  
enscript - convert text files to PostScript, HTML, RTF, ANSI, and over  
env - run a program in a modified environment  
envsubst - substitutes environment variables in shell format strings  
eog - a GNOME image viewer  
epiphany - simple to use web browser for GNOME  
epsffit - fit encapsulated PostScript file (EPSF) into constrained size  
epstopdf - convert an EPS file to PDF  
eqn2graph - convert an EQN equation into a cropped image  
eqn - format equations for troff  
espeak - A multi-lingual software speech synthesizer.  
etags, ctags - generate tag file for Emacs, vi  
etex, einitex, evirtex - extended TeX  
evince - GNOME document viewer  
evince-thumbnailer - create png thumbnails from PostScript and PDF doc  
evolution-addressbook-export - export addressbook content from Evolution  
evolution - groupware suite for GNOME containing e-mail, calendar,  
exicyclog - Cycle exims logfiles  
exifautotran - Transforms Exif files so that Orientation becomes 1  
EXIGREP - Search Exims main log  
exim4 - a Mail Transfer Agent  
exim\_checkaccess - Check address acceptance from given IP  
exim\_convert4r4 - Convert Exim configuration from v3 to v4 format  
exim\_db - Manage Exims hint databases (exim\_dumpdb, exim\_fixdb,  
exim\_dbmbuild - Build a DBM file.  
exim\_lock - Mailbox maintenance  
eximstats - generates statistics from Exim mainlog or syslog files.  
exinext - Finding individual retry times  
exipick - selectively display messages from an Exim queue  
exiqgrep - Search in the exim queue  
exiqsumm - Summarising the queue  
exiwhat - Finding out what Exim processes are doing

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expand - convert tabs to spaces
expiry - check and enforce password expiration policy
expr - evaluate expressions
extcompose - Compose a reference to external data for inclusion in a
extensionproxy - KDE kicker panel extension proxy
extractres - filter to extract resources from a PostScript document
eyuvtoppm - convert a Berkeley YUV file to a portable pixmap file
factor - factor numbers
faillog - display faillog records or set login failure limits
faked - daemon that remembers fake ownership/permissions of files
fakeroot - run a command in an environment faking root privileges for
false - do nothing, unsuccessfully
famd - The File Alteration Monitor (FAM) daemon
fastjar - archive tool for Java archives
fc-cache - build font information cache files
fc-cat - read font information cache files
fc-list - list available fonts
fc-match - match available fonts
fdformat - Low-level formats a floppy disk
fdisk - Partition table manipulator for Linux
festival - a text-to-speech system.
festival_client - client access to festiva; text-to-speech server mode
fetchmail - fetch mail from a POP, IMAP, ETRN, or ODMR-capable server
ffmpeg - FFmpeg video converter
ffplay - FFplay media player
ffserver - FFserver video server
fgconsole - print the number of the active VT.
fiascotopnm - Convert compressed FIASCO image to PGM, or PPM
file - determine file type
filefrag - report on file fragmentation
File Roller - archive manager for GNOME
filesharelist, fileshareset - add/remove/list NFS and Samba file shares
filterdiff - extract or exclude diffs from a diff file
find2perl - translate find command lines to Perl code
findfs - Find a filesystem by label or UUID
find - search for files in a directory hierarchy
findsmb - list info about machines that respond to SMB name queries on
finger - user information lookup program
fitstopnm - convert a FITS file into a portable anymap
fix_bs_and_del - Fix the Delete and BackSpace keys on a console
fixcvsdiff - fix problematic diff files
fixdlsrps - filter to fix DviLaser/PS documents to work with PSUtils
fixfmpls - filter to fix Framemaker documents so PSUtils work
fixmacps - filter to fix Macintosh documents with saner version of md
fixnt - Filter for the Windows NT postscript printer driver.
fixpsditps - filter to fix Transcript psdit documents so PSUtils work
fixpspps - filter to fix PSpaint PostScript so PSUtils work
fixps - sanitize PostScript files
fixscribeps - filter to fix Scribe documents so PSUtils work
fixtppps - filter to fix Tpscript documents to work with PSUtils
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fixwfwps - filter to fix Word for Windows documents so PSUtils work  
fixwpps - filter to fix WP documents so PSUtils work  
fixwwps - filter to fix Windows Write documents so PSUtils work  
flipdiff - exchange the order of two incremental patches  
flock - Manage locks from shell scripts  
fmt - simple optimal text formatter  
fmtutil - utility for maintaining TeX format files  
fold - wrap each input line to fit in specified width  
font2c - Write PostScript Type 0 or Type 1 font as C code  
font2psf - convert a 256-character fonts to PSF format  
fontinst - utility to run TeX as fontinst  
fonttosfnt - Wrap a bitmap font in a sfnt (TrueType) wrapper  
foo2hp2600-wrapper - part of the printer driver foo2zjs  
foo2lava - Convert Ghostscript pbmraw or bitcmyk format into a LAVAFLOW  
foo2lava-wrapper - Convert Postscript into a LAVAFLOW printer stream  
foo2oak-wrapper - Convert Postscript into an OAKT printer stream  
foo2xqx - Convert Ghostscript pbmraw into a XQX printer stream  
foo2xqx-wrapper - Convert Postscript into a XQX printer stream  
foo2zjs - Convert Ghostscript pbmraw or bitcmyk format into a ZJS  
foo2zjs-icc2ps - part of the printer driver foo2zjs  
foo2zjs-wrapper - Convert Postscript into a ZJS printer stream  
foomatic-addpjloptions - Format PJL option information the for foomatic  
foomatic-combo-xml - <put a short description here>  
foomatic-compiledb - Compile the Foomatic printer/driver database  
foomatic-configure - the main configuration program of the foomatic  
foomatic-getpjloptions - <put a short description here>  
foomatic-gswrapper - foomatic wrapper for ghostscript  
foomatic-kitload - installs a data kit into the foomatic database.  
foomatic-perl-data - generate Perl data structures from XML  
foomatic-ppdfile - Generate a PPD file for a given printer/driver combo  
foomatic-ppd-options - show the PPD options  
foomatic-preferred-driver - <put a short description here>  
foomatic-printjob - manage printer jobs in a spooler-independent fash  
foomatic-rip - Universal print filter/RIP wrapper  
formail - mail (re)formatter  
free - Display amount of free and used memory in the system  
freetype-config show information about installed freetype2 libraries  
freshclam - update virus databases  
fribidi - a command line interface for the fribidi library, converts a  
from - print names of those who have sent mail  
fsck - check and repair a Linux file system  
fsck.minix - a file system consistency checker for Linux  
fsck.nfs - Dummy fsck.nfs script that always returns success.  
fslsfonts - list fonts served by X font server  
f-spot - A program to manage a photo collection  
fstobdf - generate BDF font from X font server  
fstopgm - convert a Usenix FaceSaver(tm) file into a portable graymap  
ftp - Internet file transfer program  
funzip - filter for extracting from a ZIP archive in a pipe  
fuser - identify processes using files or sockets

g3topbm - convert a Group 3 fax file into a portable bitmap  
gacutil - Global Assembly Cache management utility.  
gawk - pattern scanning and processing language  
gcalctool - a desktop calculator  
gccbug - Reporting GCC Bugs  
gconf-editor - an editor for the GConf configuration system  
gconf-schemas - register gconf schemas with the gconf database  
gconftool-2 - GNOME configuration tool  
gda-config-tool-3.0 - Tool for managing libgda configuration file.  
gdk-pixbuf-csource - C code generation utility for GdkPixbuf images  
gdk-pixbuf-query-loaders - GdkPixbuf loader registration utility  
gdmflexiserver - start a GDM session using the GDM flexible server  
GDM - The GNOME Display Manager  
gedit - text editor for the GNOME Desktop  
gemtopnm - convert a GEM .img file into a portable anymap  
gencat - Generate message catalog  
genisoimage - create ISO9660/Joliet/HFS filesystem with optional Rock  
getafm - create an AFM file for a PostScript font.  
getconf - Query system configuration variables  
geteltorito - an El Torito boot image extractor  
getent - get entries from administrative database  
getfilename - Ask the user to name a file in a given format  
gethostip convert an IP address into various formats  
geticonset - gets the current Window Maker iconset  
getkeycodes - print kernel scancode-to-keycode mapping table  
getnonfreefonts - download and install fonts which cannot be dis  
 getopt - parse command options (enhanced)  
getstyle - dumps the current Window Maker style related configuration  
gettextize - install or upgrade gettext infrastructure  
gettext - translate message  
gfloppy - a simple floppy formatter for the GNOME  
gftodvi - make proof sheets from generic font files  
gftopk - convert generic font files to packed font files  
gftype - translate a generic font file for humans to read  
giftopnm - convert a GIF file into a portable anymap  
gimp - an image manipulation and paint program.  
gimp-remote - tells a running GIMP to open a (local or remote) image  
gininstall-info - update info/dir entries  
gkeytool - Manage private keys and public certificates  
gksu - GTK+ frontend for su and sudo  
glib-genmarshal - C code marshaller generation utility for GLib  
glib-gettextize - gettext internationalization utility  
glib-mkenums - C language enum description generation utility  
gnome-about - The Gnome about box.  
gnome-app-install - Application Installer gnome-codec-install - Codec  
gnome-app-install-helper - Helper for the Application Installer  
GNOME Character map - Unicode character picker and font browser  
gnome-control-center Desktop properties manager  
gnome-desktop-item-edit tool to edit .desktop file  
gnome-dictionary - Look up words on dictionaries

gnome-keyboard-properties - manage keyboard behaviour in GNOME  
gnome-keyring-daemon - keep password and other secrets for users  
gnome-mount - Mount drives and volumes using HAL and read settings from  
gnome-panel - display the GNOME panel  
gnome-power-manager - gnome power manager userspace daemon  
gnome-power-preferences - gnome power preferences gui  
gnome-power-statistics - gnome power statistics gui  
gnome-screensaver-command - controls GNOME screensaver  
GNOME Screensaver Preferences - configure GNOME Screensaver  
GNOME Screensaver - screen saver and locker  
gnome-screenshot - capture screen or window and save the image to a  
gnome-search-tool - the GNOME Search Tool  
gnome-session-remove - Remove or list applications in the current GNOME  
gnome-session-save - Saves the current GNOME session (or terminates it)  
gnome-session - Starts up the GNOME desktop environment  
gnome-sound-recorder - simple sound recorder  
gnome-system-log - the GNOME System Log Viewer  
gnome-system-monitor view and control processes  
gnome-terminal is a terminal emulation application.  
gnome-volume-control - Sound volume controller  
gnome-volume-properties - configure the gnome-volume-manager daemon.  
gnome-wm - Launches the user selected window manager for the GNOME ses  
gnumeric - a GNOME spreadsheet application.  
gnuplot - an interactive plotting program  
gobject-query - display a tree of types  
gorbd - - An object request broker daemon  
gouldtoppm - convert Gould scanner file into a portable pixmap  
gparted - Front-end to parted for manipulating disk partitions  
gpasm - GNU PIC assembler  
gpasswd - administer the /etc/group and /etc/gshadow files  
gpdasm - GNU PIC disassembler  
gpg-convert-from-106 - converts your public keyring and trustdb from  
gpg-error - program to convert GnuPG error numbers to text  
gpg - OpenPGP encryption and signing tool  
gpgsplit - Split an OpenPGP message into packets  
gpgv - Verify OpenPGP signatures  
gpg-zip - encrypt or sign files into an archive  
gplib - GNU PIC librarian  
gplink - GNU PIC linker  
gprof - display call graph profile data  
gpstrip - discard symbols from object file  
gpvc - GNU PIC COD file viewer  
gpvo - GNU PIC object file viewer  
GQview - GTK based multiformat image viewer  
grepdiff - show files modified by a diff containing a regex  
grep, egrep, fgrep, rgrep - print lines matching a pattern  
grepjar - search files in a jar file for a pattern  
grmid - - RMI activation system daemon  
grmiregistry - - Remote object registry  
grn - groff preprocessor for gremlin files

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grodvi - convert groff output to TeX dvi format
groffer - display groff files and man pages on X and tty
groff - front-end for the groff document formatting system
grog - guess options for groff command
grohtml - html driver for groff
grolbp - groff driver for Canon CAPSL printers (LBP-4 and LBP-8 series
grolj4 - groff driver for HP Laserjet 4 family
grops - PostScript driver for groff
grotty - groff driver for typewriter-like devices
groupadd - create a new group
groupdel - delete a group
groupmod - modify a group definition on the system
groups - print the groups a user is in
growisofs - combined genisoimage frontend/DVD recording program.
grpck - verify integrity of group files
grub-install - install GRUB on your drive
grub-md5-crypt - Encrypt a password in MD5 format
grub-reboot - manual page for grub-reboot 0.01
grub-set-default - Set the default boot entry for GRUB
grub-terminal - Generate a terminfo command from a terminfo name
grub - the grub shell
gserialver - version command
gsftopk - render a ghostscript font in TeX pk form
gs - Ghostscript (PostScript and PDF language interpreter and pre
gslp - Format and print text using ghostscript
gsnd - Run ghostscript (PostScript and PDF engine) without display
gst-feedback - generate debug info for GStreamer bug reports
gst-inspect - print info about a GStreamer plugin or element
gst-launch - build and run a GStreamer pipeline
gstreamer-properties - Multimedia systems selector
gst-typefind - print MIME type of file
gst-xmllaunch - build and run a GStreamer pipeline from an XML serial
gtf - calculate VESA GTF mode lines
gThumb - an image viewer and browser for GNOME
gtk-query-immodules-2.0 - Input method module registration utility
gtk-update-icon-cache - Icon theme caching utility
gv - Postscript and PDF viewer
gxditview - display gtroff output files
gzexe - compress executable files in place
gzip, gunzip, zcat - compress or expand files
h2ph - convert .h C header files to .ph Perl header files
h2xs - convert .h C header files to Perl extensions
hald - HAL daemon
hal-disable-polling - disable polling on drives with removable media
hal-find-by-capability - find device objects by capability matching
hal-find-by-property - find device objects by property matching
hal-get-property - get a property from a device object
hal-is-caller-locked-out - determine if a caller is locked out
hal-lock - lock an interface
hal-set-property - set a property on a device object
```

halt, reboot, poweroff - stop the system.  
hardinfo - shows hardware information in a GTK+ window  
hdparm - get/set SATA/ATA device parameters  
head - output the first part of files  
helpztags - generate the help tags file for directory  
hexdump, hd - ASCII, decimal, hexadecimal, octal dump  
hipstopgm - convert a HIPS file into a portable graymap  
host - DNS lookup utility  
hostid - print the numeric identifier for the current host  
hostname - show or set the systems host name  
hpftodit - create font description files for use with groff -Tlj4  
hpijs - HP IJS server for the GhostScript IJS client driver  
hsqldb-databasemanager - GUI database management tool  
hsqldb-database managerswing - GUI database management tool  
hsqldb-querytool - GUI database management tool  
hsqldb-sqltool - JDBC database console frontend  
hsqldb-transfer - transfers data from one JDBC database to another  
htcacheclean - Clean up the disk cache  
htdbm - Manipulate DBM password databases  
htdigest - manage user files for digest authentication  
html2text - an advanced HTML-to-text converter  
htpasswd - Manage user files for basic authentication  
httptxt2dbm - Generate dbm files for use with RewriteMap  
hwclock - query and set the hardware clock (RTC)  
iceauth - ICE authority file utility  
iceweasel - a Web browser for X11 derived from the Mozilla browser  
icontopbm - convert a Sun icon into a portable bitmap  
iconvconfig - Create fastloading iconv module configuration file  
iconv - Convert encoding of given files from one encoding to another  
identify - describes the format and characteristics of one or more  
id - print user identity  
iecset - Set or dump IEC958 status bits  
ifconfig - configure a network interface  
ifnames - Extract CPP conditionals from a set of files  
ifup - bring a network interface up  
igawk - gawk with include files  
ijsgutenprint - Ghostscript driver for Gutenprint  
ilbmtoppm - convert an ILBM file into a portable pixmap  
imagetops - generic image to ps filter  
imgtoppm - convert an Img-whatnot file into a portable pixmap  
imlib-config - Display Imlib and GDK-Imlib Library Configuration  
import - saves any visible window on an X server and outputs it as an  
includeres - filter to include resources in a PostScript document  
indxbib - make inverted index for bibliographic databases  
inetd - internet super-server  
infocmp - compare or print out terminfo descriptions  
infokey - compile customizations for Info  
info - read Info documents  
infotocap - convert a terminfo description into a termcap description  
init, telinit - process control initialization

Inkscape - an SVG (Scalable Vector Graphics) editing program.  
inkview - slideshow program which uses SVG files  
innoschecksum - offline InnoDB file checksum utility  
innotop - MySQL and InnoDB transaction/status monitor.  
insmod simple program to insert a module into the Linux Kernel  
install - copy files and set attributes  
install-docs - manage online Debian documentation  
install-info - create or update entry in Info dir file  
installkernel - install a new kernel image  
install-keymap expand a given keymap and install it as boot-time  
install-menu - Process a menu method and generate the menu files for a  
install-sgmlcatalog - maintain transitional SGML catalog  
instmodsh - A shell to examine installed modules  
interdiff - show differences between two diff files  
intltool-extract - generate header files which can be read by gettext  
intltoolize - copy intltool related files to software package  
intltool-merge - merge translated strings into various types of file  
intltool-prepare - Prepare software to make use of intltool  
intltool-update - updates PO template file and merge translations with  
invoke-rc.d - executes System-V style init script actions  
ionice - get/set program io scheduling class and priority  
ip6tables - IPv6 packet filter administration  
ip6tables-restore - Restore IPv6 Tables  
ip6tables-save - Save IPv6 Tables  
ipcrm - remove a message queue, semaphore set or shared memory id  
ipcs - provide information on ipc facilities  
ip - show / manipulate routing, devices, policy routing and tunnels  
iptables - administration tool for IPv4 packet filtering and NAT  
iptables-apply - a safer way to update iptables remotely  
iptables-restore - Restore IP Tables  
iptables-save - Save IP Tables  
iptables-xml - Convert iptables-save format to XML  
isosize - outputs the length of a iso9660 file system  
ispell-autobuildhash - Autobuilding the ispell hash file for some dicts  
ispell, buildhash, munchlist, findaffix, tryaffix, icombine, ijoin -  
ispell-wrapper - smart wrapper for ispell  
iwconfig - configure a wireless network interface  
iwevent - Display Wireless Events generated by drivers and setting  
iwgetid - Report ESSID, NWID or AP/Cell Address of wireless network  
iwlist - Get more detailed wireless information from a wireless inter  
iwpriv - configure optionals (private) parameters of a wireless network  
iwspy - Get wireless statistics from specific nodes  
Java IDL: Transient Naming Service - tnameserv  
javaws - a Java Web Start client  
join - join lines of two files on a common field  
jpeg2yuv - Convert jpeg images to the yuv format.  
jpegexiforient - reads or writes the Exif Orientation Tag  
jpegtopnm - convert JPEG/JFIF file to portable pixmap or graymap  
jpegtran - lossless transformation of JPEG files  
kab2kabc - KDE address book converter

kabc2mutt - kabc to mutt converter  
kaddprintewizard Start the add printer wizard  
kaddressbook - The KDE Address Book  
kaffeine - A media player for KDE that can use multiple backends for  
kasbar - An alternative task manager  
kbd-config - Configure the console keyboard  
kbd\_mode - report or set the keyboard mode  
kbdrate - reset the keyboard repeat rate and delay time  
kblankscrn.kss - KDE screensaver which shows a blank screen  
kbuildsyncoca Rebuilds the system configuration cache  
kcheckpass - The KCheckPass authentication software  
kcminit - runs startups initialization for Control Modules.  
kcmshell - tool to start single KDE control modules  
kconf\_update KDE Tool for updating user configuration files  
kcookiejar HTTP Cookie Daemon  
kdcop - A graphical DCOP browser/client  
kdebugdialog - A dialog box for setting preferences for debug output  
kde-config A little program to output installation paths  
kded triggers Sycoca database updates when needed  
kdeinit - KDE process launcher  
kdeinit\_shutdown - shuts down kdeinit master process  
kdeinit\_wrapper, kshell, kwrapper - start applications via kdeinit  
kde-menu - KDE Menu query tool.  
kdesu - Runs a program with elevated privileges.  
kdesu\_stub - used by KDE su  
kdialog - Show KDE dialog boxes from shell scripts  
kdontchangethehostname Informs KDE about a change in hostname  
keditbookmarks - Konqueror Bookmark Editor  
kerneloops - program to collect and submit kernel oopses to ker  
kernel-packageconfig - Internal handler of /etc/kernel-pkg.conf.  
keytool - Key and Certificate Management Tool  
kfile A commandline tool to read and modify metadata of files  
kfind - KDE find tool  
kfmclient - KDE tool for opening URLs from the command line  
kgrantpty - KDE helper program to fix terminal permissions  
khotkeys - daemon to bind actions to triggers and conditions  
khotnewstuff - KDE tool to test GHNS repositories  
kicker - The KDE panel  
killall15 -- send a signal to all processes.  
killall - kill processes by name  
kill - send a signal to a process  
kinstalltheme KDE Tool to build a cache list of all pixmap themes  
kioexec, kfmexec - open remote files, watch modifications, ask for  
kio\_http\_cache\_cleaner KDE HTTP cache maintenance tool  
kio\_media\_mounthelper - kio\_media\_mounthelper  
kio\_system\_documenthelper - KDE helper script used by document.desktop  
kio\_uiserver KDE Progress Information UI Server  
klauncher - daemon for service activation in KDE  
kmailservice mail service  
kmk - framework for writing simple makefiles for complex tasks

knetattach - KDE Network Wizard  
koi8rxterm - X terminal emulator for KOI8-R environments  
konqueror - Web browser, file manager, ...  
kpac\_dhcp\_helper - KDE helper program for automatic proxy discovery via  
kpseaccess - determine whether a file can be accessed  
kpsereadlink - print contents of symbolic link  
kpsestat - compute octal mode from mode of existing file  
kpsetool - script to make t eTeX-style kpsetool, kpsexpand, and kpsepath  
kpsewhere - Expanding kpsewhich to separately iterate over each texmf  
kpsewhich - standalone path lookup and expansion for kpathsea  
krandom.kss - Start a random KDE screen saver  
krb5-config - tool for linking against MIT Kerberos libraries  
kreadconfig - Read KConfig entries (for use in shell scripts)  
ksendbugemail Sends a short bug report to submit@bugs.kde.org  
kstartupconfig, kdostartupconfig - KDE configuration options loader  
kstart - Utility to launch applications with special window properties  
ksystraycmd - Allows any application to be kept in the system tray  
ktelnetservice telnet service  
ktradertest - A KTrader testing tool  
ktrash - Helper program to handle the KDE trash can  
kwritconfig - Write KConfig entries (for use in shell scripts)  
kxkb - A utility to switch keyboard maps  
lacheck - A consistency checker for LaTeX documents.  
lame - create mp3 audio files  
laptop-detect - attempt to detect a laptop  
last, lastb - show listing of last logged in users  
lastlog - reports the most recent login of all users or of a given user  
latex, elatex, lambda, pdflatex - structured text formatting and type  
lav2mpeg - easy conversion of lav files to mpeg  
lav2wav - Extract the audio out of MJPEG container files to stdout  
lav2yuv - Convert a MJPEG file to raw yuv  
lavadecode - Decode a XQX stream into human readable form.  
lavpipe - creates raw YUV streams from pipe list scripts  
lavplay - Playback and edit MJPEG video  
lavrec - Record MJPEG-video from a zoran/video4linux-device  
lavtrans - Convert MJPEG videos to other MJPEG video formats  
lcf - Determine which of the historical versions of a config is  
ldconfig - configure dynamic linker run-time bindings  
ldd - print shared library dependencies  
ld - The GNU linker  
leaftoppm - convert Interleaf image format to a portable anymap  
lessecho - expand metacharacters  
lessfile, lesspipe - "input preprocessor" for less.  
lesskey - specify key bindings for less  
less - opposite of more  
lexgrog - parse header information in man pages  
libgcrypt-config - script to get information about the installed ver  
libglade-convert - Utility to convert old .glade files into new ones.  
libgnutls-config, libgnutls-extra-config - script to get information  
libgpg-error-config - script to get information about the installed

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libgraphviz4-config-update - maintain libgraphvzs configuration file
libnetcfg - configure libnet
libpng12-config - get information about installed libpng library
libtasn1config - Get information about the installed location of lib
Liferea - RSS/RDF and Atom news aggregator
line - read one line
link - call the link function to create a link to a file
lispmtopgm - convert a Lisp Machine bitmap file into pgm format
listres - list resources in widgets
lkbib - search bibliographic databases
ln - make links between files
lnstat - unified linux network statistics
lnusertemp tool to create KDE resources and symlinks to them
loadkeys - load keyboard translation tables
localedef - compile locale definition files
locale-gen generates localisation files from templates
locale - Get locale-specific information.
locate - find files by name
lockfile - conditional semaphore-file creator
lockfile-progs - command-line programs to safely lock and unlock files
logger - a shell command interface to the syslog(3) system log module
login - begin session on the system
logname - print users login name
logresolve - Resolve IP-addresses to hostnames in Apache log files
logrotate - rotates, compresses, and mails system logs
logsave - save the output of a command in a logfile
lookbib - search bibliographic databases
look - display lines beginning with a given string
lorder - list dependencies for object files
losetup - set up and control loop devices
lpadmin - configure cups printers and classes
lpc - line printer control program
lpinfo - show available devices or drivers
lpmove - move a job or all jobs to a new destination
lpoptions - display or set printer options and defaults
lppasswd - add, change, or delete digest passwords.
lp - print files
lpq - show printer queue status
lprm - cancel print jobs
lpr - print files
lpstat - print cups status information
lrelease - generate Qt message files from Qt Linguist translation files
lsattr - list file attributes on a Linux second extended file system
lsb_release - print distribution-specific information
lsdiff - show which files are modified by a patch
lshal - list HAL devices
ls - list directory contents
lsmod program to show the status of modules in the Linux Kernel
lsof - list open files
lspci - list all PCI devices
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lspgpot - extracts the ownertrust values from PGP keyrings and list  
lss16toppm Convert an LSS-16 image to PPM  
lsusb - list USB devices  
luit - Locale and ISO 2022 support for Unicode terminals  
lupdate - update Qt Linguist translation files  
lwp-download - Fetch large files from the web  
lwp-mirror - Simple mirror utility  
lwp-request, GET, POST, HEAD - Simple command line user agent  
lwp-rget - Retrieve web documents recursively  
lxterm - locale-sensitive wrapper for xterm  
lynx - a general purpose distributed information browser for the World  
lz - gunzips and shows a listing of a gzipd tard archive  
lzma, unlzma, lzcat - LZMA compression and decompression tool  
m4 - macro processor  
macptopbm - convert a MacPaint file into a portable bitmap  
Magick-config - get information about the installed version of  
Magick++-config - get information about the installed version of Mag  
MagickCore-config - get information about the installed version of  
MagickWand-config - get information about the installed version of the  
magnifier - GNOME Magnifier (gnome-mag)  
mail, mailx, Mail - send and receive mail  
mailshar, remsync, mail-files - GNU sharutils  
mailstat - shows mail-arrival statistics  
mailto - Simple multimedia mail sending program  
MAKEDEV - create devices  
make\_driver\_db\_cups - create a printer database from ppd files  
make\_driver\_db\_lpr - create a printer database from aps filter database  
make - GNU make utility to maintain groups of programs  
makeindex - a general purpose, formatter-independent index processor  
makeinfo - translate Texinfo documents  
make-kpkg - build Debian kernel packages from Linux kernel sources  
make-ssl-cert - Debconf wrapper for openssl  
makestrs - makes string table C source and header(s)  
man - an interface to the on-line reference manuals  
mandb - create or update the manual page index caches  
manpath - determine search path for manual pages  
mawk - pattern scanning and text processing language  
mbchk - check the format of a Multiboot kernel  
mcheck - verify all files on an MS-DOS formatted disk  
mcomp - Compares two files using mtools  
mcookie - generate magic cookies for xauth  
md5sum - compute and check MD5 message digest  
mdatopbm - convert a Microdesign .mda or .mdp file into a portable  
meinproc KDE Translator for XML  
mesg - control write access to your terminal  
METACITY-MESSAGE - a command to send a message to Metacity  
METACITY - minimal GTK2 Window Manager  
metacity-theme-viewer - view metacity themes  
metacity-window-demo - demo of window features  
metamail - infrastructure for mailcap-based multimedia mail handling

metasend - Crude interface for sending non-text mail  
mf, mf-nowin, inimf, virmf - Metafont, a language for font and logo  
mft - translate Metafont code to TeX code for prettyprinting  
mgrtopbm - convert a MGR bitmap into a portable bitmap  
mii-tool - view, manipulate media-independent interface status  
mimeit - base64-encode stdin and mail it  
mimencode - Translate to and from mail-oriented encoding formats  
minicom - friendly serial communication program  
mkafmmap - creates font map for AFM files  
mkboot - makes a bootdisk  
mkdir - make directories  
mkdosfs - create an MS-DOS file system under Linux  
mke2fs - create an ext2/ext3 filesystem  
mkfifo - make FIFOs (named pipes)  
mkfontdir - create an index of X font files in a directory  
mkfontscale - create an index of scalable font files for X  
mkfs.bfs - make an SCO bfs filesystem  
mkfs - build a Linux file system  
mkfs.minix - make a Linux MINIX filesystem  
mkindex - script to process LaTeX index and glossary files  
mkinitramfs-kpkg - generates an initramfs image for kernel-package  
mkinitramfs - low-level tool for generating an initramfs image  
mklost+found - create a lost+found directory on a mounted Linux second  
mk\_modmap - translate a Linux keytable file into an xmodmap file  
mknod - make block or character special files  
mkocp - frontend to otp2ocp(1)  
mkofm - front end to mktextrfm(1)  
mkpasswd - Overfeatured front end to crypt(3)  
mkswap - set up a Linux swap area  
mktemp - make temporary filename (unique)  
mktexlsr - create ls-R databases  
mktexmf - create a Metafont source file  
mktexpk - create a PK file for a font  
mktextrfm - create a TFM file for a font  
mkzftree - Create a zisofs/RockRidge compressed file tree  
mmroff - reference preprocessor  
moc - generate Qt meta object support code  
modinfo program to show information about a Linux Kernel module  
modprobe program to add and remove modules from the Linux Kernel  
module-assistant - manage kernel modules packages  
mogrify - resize an image, blur, crop, despeckle, dither, draw on,  
mono - Monos ECMA-CLI native code generator (Just-in-Time and Ahead-  
montage - create a composite image by combining several separate  
more - file perusal filter for crt viewing  
mount - mount a file system  
mount.nfs, mount.nfs4 - mount a Network File System  
mountpoint - see if a directory is a mountpoint  
mousetweaks - Accessibility enhancements for the mouse  
mp2enc - Simple MPEG-1 layer-II audio encoder  
mpeg2enc - MPEG-1/2 encoder

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mpg123 - play audio MPEG 1.0/2.0/2.5 stream (layers 1, 2 and 3)
mpg321 Free clone of mpg123, a command-line mp3 player
mplayer - movie player
mplex - MPEG 1/2 program/system stream multiplexer
msgattrib - attribute matching and manipulation on message catalog
msgcat - combines several message catalogs
msgcmp - compare message catalog and template
msgcomm - match two message catalogs
msgconv - character set conversion for message catalog
msgen - create English message catalog
msgexec - process translations of message catalog
msgfilter - edit translations of message catalog
msgfmt - compile message catalog to binary format
msggrep - pattern matching on message catalog
msginit - initialize a message catalog
msgmerge - merge message catalog and template
msgunfmt - uncompile message catalog from binary format
msguniq - unify duplicate translations in message catalog
mysql2mysql - convert mSQL programs for use with MySQL
mt - control magnetic tape drive operation
mtrace - Interpret output from MALLOC_TRACE
mtvtoppm - convert output from the MTV or PRT ray tracers into a
mute - use aumix to mute your soundcard
mutt_dotlock - Lock mail spool files.
mutt - The Mutt Mail User Agent
mv - move (rename) files
mxtar - Wrapper for using GNU tar directly from a floppy disk
myisamchk - MyISAM table-maintenance utility
myisam_ftdump - display full-text index information
myisamlog - display MyISAM log file contents
myisampack - generate compressed, read-only MyISAM tables
my_print_defaults - display options from option files
mysqlaccess - client for checking access privileges
mysqladmin - client for administering a MySQL server
mysqlbinlog - utility for processing binary log files
mysqlbug - MySQL bug reporting tool.
mysqlcheck - a table maintenance and repair program
mysql_client_test - test client API
mysql_config - get compile options for compiling clients
mysql_convert_table_format - convert tables to use a given storage
mysqld_multi - manage multiple MySQL servers
mysqld_safe - MySQL server startup script
mysqld - the MySQL server
mysqldump - a database backup program
mysqldumpslow - Parse and summarize the MySQL slow query log.
mysql_explain_log - use EXPLAIN on statements in query log
mysql_find_rows - extract SQL statements from files
mysql_fix_extensions - normalize table filename extensions
mysql_fix_privilege_tables - upgrade MySQL system tables
mysqlhotcopy - a database backup program
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mysqlimport - a data import program  
mysql\_install\_db - initialize MySQL data directory  
mysqlmanager - the MySQL Instance Manager  
mysqlreport - Makes a friendly report of important MySQL status values  
mysql\_secure\_installation - improve MySQL installation security  
mysql\_setpermission - interactively set permissions in grant tables  
mysqlshow - display database, table, and column information  
mysql\_tableinfo - generate database metadata  
mysqltest - program to run test cases  
mysql - the MySQL command-line tool  
mysql\_tzinfo\_to\_sql - load the time zone tables  
mysql\_upgrade - check tables for MySQL upgrade  
mysql\_waitpid - kill process and wait for its termination  
mysql\_zap - kill processes that match a pattern  
naim - console mode chat client  
NAME  
nano - Nanos ANOther editor, an enhanced free Pico clone  
Nautilus Connect Server - To Access a remote server  
nautilus-file-management-properties - File Management Preferences  
Nautilus - the GNOME File Manager  
nc - TCP/IP swiss army knife  
ndb\_config - extract NDB configuration information  
ndb\_delete\_all - delete all rows from NDB table  
ndb\_desc - describe NDB tables  
ndb\_drop\_index - drop index from NDB table  
ndb\_drop\_table - drop NDB table  
ndbd - the storage engine node process  
ndb\_error\_reporter - NDB error-reporting utility  
ndb\_mgmd - the management server process  
ndb\_mgm - the management client process  
ndb\_restore - restore a Cluster backup  
ndb\_select\_all - print rows from NDB table  
ndb\_select\_count - print row counts for NDB tables  
ndb\_show\_tables - display list of NDB tables  
ndb\_waiter - wait for cluster to reach a given status  
neotoppm - convert an Atari Neochrome .neo into a portable pixmap  
neqn - format equations for ascii output  
netrik - The ANTRIK internet browser  
net-snmp-config - returns information about installed net-snmp  
netstat - Print network connections, routing tables, interface statistics  
net - Tool for administration of Samba and remote CIFS servers.  
network-admin - Network Administration Tool  
newgrp - log in to a new group  
newusers - update and create new users in batch  
nfsstat - list NFS statistics  
ngettext - translate message and choose plural form  
nice - run a program with modified scheduling priority  
nip2 - image processing with the VIPS library  
nl - number lines of files  
nmblookup - NetBIOS over TCP/IP client used to lookup NetBIOS names

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nm - list symbols from object files
nohup - run a command immune to hangups, with output to a non-tty
nologin - politely refuse a login
nroff - emulate nroff command with groff
nslookup - query Internet name servers interactively
nstat, rtacct - network statistics tools.
nsupdate - Dynamic DNS update utility
ntpdate-debian - set the date and time via NTP
ntpdate - set the date and time via NTP
objcopy - copy and translate object files
objdump - display information from object files.
oclock - round X clock
od - dump files in octal and other formats
ogg123 - plays Ogg Vorbis files
oggdec - simple decoder, Ogg Vorbis file to PCM audio file (WAV or
oggenc - encode audio into the Ogg Vorbis format
ogginfo - gives information about Ogg files, and does extensive valid
ogonkify - international support for PostScript
okidecode - Decode a ZjStream into human readable form
omshell - OMPI Command Shell
on_ac_power - test whether computer is running on AC power
openssl - OpenSSL command line tool
openssl-vulnkey - check blacklist of compromised certificates, requests
openvt - start a program on a new virtual terminal (VT).
orbd - The Object Request Broker Daemon
orca - a screen reader / magnifier
over - pretty print and scroll source code on terminal
ownership - Compaq ownership tag retriever
p7zip - Wrapper on 7zr, a 7-zip file archiver with high compression
pack200 - JAR Packing tool
palmtopnm - convert a Palm pixmap into a portable anymap
pamcut - cut a rectangle out of a PAM, PBM, PGM, or PPM image
pamdeinterlace - remove ever other row from a PAM/PNM image
pamdice - slice a Netpbm image into many horizontally and/or vertically
pamfile - describe a Netpbm (PAM or PNM) file
pam_getenv - get environment variables from /etc/environment
pamoil - turn a PAM image into an oil painting
pamstack - stack planes of multiple PAM images into one PAM image
pamstretch-gen - use pamstretch and pnmscale to scale by non-integer
pamstretch - scale up a PNM or PAM image by interpolating between pix
pam_tally - The login counter (tallying) module
panel-test-applets display installed applets
pango-querymodules - Module registration utility
paps - UTF-8 to PostScript converter using Pango
partx - telling the kernel about presence and numbering of on-disk par
passwd - change user password
paste - merge lines of files
pat2ppm - Converts an image file from PAT to PPM format.
patch - apply a diff file to an original
patch-metamail - Install a patch to the latest metamail release
```

patextract - Extract a part of a PNG image file  
patgen - generate patterns for TeX hyphenation  
pathchk - check whether file names are valid or portable  
pbmclean - flip isolated pixels in portable bitmap  
pbmlife - apply Conways rules of Life to a portable bitmap  
pbmmake - create a blank bitmap of a specified size  
pbmmask - create a mask bitmap from a regular bitmap  
pbmpage - create a one page test pattern for printing  
pbmpscale - enlarge a portable bitmap with edge smoothing  
pbmreduce - read a portable bitmap and reduce it N times  
pbmtextps - render text into a bitmap via postscript  
pbmtext - render text into a bitmap  
pbmto10x - convert a portable bitmap into Gemini 10X printer graphics  
pbmtoascii - convert a portable bitmap into ASCII graphics  
pbmtoatk - convert portable bitmap to Andrew Toolkit raster object  
pbmtobbnbg - convert a portable bitmap into BitGraph graphics  
pbmtocmuwm - convert a portable bitmap into a CMU window manager bitmap  
pbmtoepsi - convert a portable bitmap into an encapsulated PostScript  
pbmtoepson - convert a portable bitmap into Epson printer graphics  
pbmtog3 - convert a portable bitmap into a Group 3 fax file  
pbmtogem - convert a portable bitmap into a GEM .img file  
pbmtogo - convert a portable bitmap into compressed GraphOn graphics  
pbmtoicon - convert a portable bitmap into a Sun icon  
pbmtolj - convert a portable bitmap into HP LaserJet format  
pbmtomacp - convert a portable bitmap into a MacPaint file  
pbmtomda - convert a portable bitmap to a Microdesign .mda  
pbmtomgr - convert a portable bitmap into a MGR bitmap  
pbmtonokia - convert a portable bitmap to Nokia Smart Messaging Formats  
pbmtopgm - convert portable bitmap to portable graymap by averaging  
pbmtoi3 - convert a portable bitmap into an Atari Degas .pi3 file  
pbmtopl - convert a portable bitmap into a Unix plot(5) file  
pbmtooppa - convert PBM image to HP Printer Performance Architecture  
pbmtopsg3 - convert PBM images to Postscript with G3 fax compression  
pbmtoptx - convert a portable bitmap into Printronix printer graphics  
pbmtowbmp - convert a portable bitmap to a wireless bitmap (wbmp) file  
pbmtox10bm - convert a portable bitmap into an X10 bitmap  
pbmtoxbm - convert a portable bitmap into an X11 bitmap  
pbmtoyb - convert a portable bitmap into a Bennet Yee "face" file  
pbmtozinc - convert a portable bitmap into a Zinc bitmap  
pbmupc - create a Universal Product Code bitmap  
pcimodules - List kernel driver modules available for all currently  
pcretest - a program for testing Perl-compatible regular expressions.  
pcxtoppm - convert a PCX file into a portable pixmap  
pdb2.5 - the Python debugger  
pdf2dsc - generate a PostScript page list of a PDF document  
pdf2ps - Ghostscript PDF to PostScript translator  
PDFCROP - crop pdf files to their minimal size.  
pdfeftex, pdfeinitex, pdfevirtex - PDF output from e-TeX  
pdffonts - Portable Document Format (PDF) font analyzer (version 3.00)  
pdfimages - Portable Document Format (PDF) image extractor (version

pdfinfo - Portable Document Format (PDF) document information extractor  
pdfopen, pdfclose - manual page for pdfopen 0.4: Acrobat Reader remote  
pdfopt - Ghostscript PDF Optimizer  
pdftex, pdfinitex, pdfvirtex - PDF output from TeX  
pdftohtml - program to convert pdf files into html, xml and png images  
pdftoppm - Portable Document Format (PDF) to Portable Pixmap (PPM) con  
pdftops - Portable Document Format (PDF) to PostScript converter (ver  
pdftotext - Portable Document Format (PDF) to text converter (version  
pdif - produce a pretty comparison between files  
peekfd - peek at file descriptors of running processes  
perlbug - how to submit bug reports on Perl  
perlivp - Perl Installation Verification Procedure  
perl - Practical Extraction and Report Language  
perror - explain error codes  
pf2afm - Make an AFM file from Postscript (PFB/PFA/PFM) font files  
pfbtopfa - Convert Postscript .pfb fonts to .pfa format using  
pfbtops - translate a PostScript font in .pfb format to ASCII  
pg - browse pagewise through text files  
pgmbentley - Bentleyize a portable graymap  
pgmcrater - create cratered terrain by fractal forgery  
pgmedge - edge-detect a portable graymap  
pgmenhance - edge-enhance a portable graymap  
pgmhist - print a histogram of the values in a portable graymap  
pgmkern - generate a convolution kernel  
pgmnoise - create a graymap made up of white noise  
pgmramp - generate a grayscale ramp  
pgmslice - extract one line of pixel values out of a portable graymap  
pgmtexture - calculate textural features on a portable graymap  
pgmtofs - convert portable graymap to Usenix FaceSaver(tm) format  
pgmtolisp - convert a portable graymap into Lisp Machine format  
pgmtopbm - convert a portable graymap into a portable bitmap  
pgmtoppm - colorize a portable graymap into a portable pixmap  
pgmtoy4m - Convert mpeg2dec pgm and pgmpipe output to YUV4MPEG2  
pgrep, pkill - look up or signal processes based on name and other  
php - PHP Command Line Interface CLI  
pi1toppm - convert an Atari Degas .pi1 into a portable pixmap  
pi3topbm - convert an Atari Degas .pi3 file into a portable bitmap  
pic2graph - convert a PIC diagram into a cropped image  
pic - compile pictures for troff or TeX  
piconv -- iconv(1), reinvented in perl  
pidgin - Pidgin Instant Messaging client  
pidof -- find the process ID of a running program.  
ping, ping6 - send ICMP ECHO\_REQUEST to network hosts  
pinky - lightweight finger  
pivot\_root - change the root file system  
pjtoppm - convert an HP PaintJet file to a portable pixmap  
pkfix - replace pk fonts in postscript files with type1 versions  
pkg-config - Return metainformation about installed libraries  
pktogf - convert packed font files to generic font files  
pktype - verify and translate a packed font bitmap file to plain text

pl2pm - Rough tool to translate Perl4 .pl files to Perl5 .pm modules.  
planner - Project Management application for GNOME  
plipconfig - fine tune PLIP device parameters  
pma-configure - enables configuration of phpMyAdmin installation  
pm-action - Suspend or Hibernate your computer  
pmap\_dump - print a list of all registered RPC programs  
pmap - report memory map of a process  
pmap\_set - set the list of registered RPC programs  
pma-secure - secures phpMyAdmin installation  
pm-is-supported - Test whether suspend or hibernate is supported.  
pmount-hal - HAL-aware wrapper around pmount  
pmount - mount arbitrary hotpluggable devices as normal user  
pm-powersave - Put your computer into low power mode  
png2pat - Converts an image file from PNG to PAT format.  
png2yuv - Convert PNG images to the YUV4MPEG stream format.  
pngtopnm - convert a Portable Network Graphics file into portable  
pnmalias - antialias a portable anymap.  
pnmarith - perform arithmetic on two portable anymaps  
pnmcat - concatenate portable anymaps  
pnmcolormap - create quantization color map for a portable anymap  
pnmcrop - composite (overlay) two portable anymap files together  
pnmcrop - general MxN convolution on a portable anymap  
pnmcrop - crop a portable anymap  
pnmcut - cut a rectangle out of a portable anymap  
pnmdensity - change the maxval in a portable anymap  
pnmenlarge - read a portable anymap and enlarge it N times  
pnmdfile - describe a portable anymap  
pnmmflip - perform one or more flip operations on a portable anymap  
pnmgamma - perform gamma correction on a portable anymap  
pnmhisteq - histogram equalise a portable anymap  
pnmhitmap - draw a histogram for a PGM or PPM file  
pnmindex - build a visual index of a bunch of anymaps  
pnminvert - invert a portable anymap  
pnmmargin - add a border to a portable anymap  
pnmmontage - create a montage of portable anymaps  
pnmnlfilt - non-linear filters: smooth, alpha trim mean, optimal esti  
pnmnorm - normalize the contrast in a Netpbm image  
pnmpad - add borders to portable anymap  
pnmpaste - paste a rectangle into a portable anymap  
pnmpsnr - compute the difference between two portable anymaps  
pnquant - quantize the colors in a Netpbm image to a smaller set  
pnremap - replace colors in a PPM image with colors from another set  
pnrotate - rotate a portable anymap by some angle  
pnmscalefixed - scale a portable anymap quickly, but less accurate  
pnmscale - scale a portable anymap  
pnmshear - shear a portable anymap by some angle  
pnmsmooth - smooth out an image  
pnmsplit - split a multi-image portable anymap into multiple single-  
pnmtile - replicate a portable anymap into a specified size  
pnmtifiasco - Convert a portable anymap to FIASCO compressed file

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pnmtofits - convert a portable anymap into FITS format
pnmtojpeg - convert PNM image to a JFIF ("JPEG") image
pnmtopalm - convert a portable anymap into a Palm pixmap
pnmtoplainpnm - convert portable any map to plain (ASCII) anymap format
pnmtopng - convert a portable anymap into a Portable Network Graphics
pnmktops - convert portable anymap to PostScript
pnmtoast - convert a portable pixmap into a Sun rasterfile
pnmtoile - convert a Netpbm image file into an RLE image file.
pnmtosgi - convert a portable anymap to a SGI image file
pnmtosir - convert a portable anymap into a Solitaire format
pnmtotiffcmyk - convert a portable anymap into a CMYK encoded TIFF file
pnmtotiff - convert a portable anymap into a TIFF file
pnmtoxwd - convert a portable anymap into an X11 window dump
pnmtoy4m - Convert PNM/PAM images to YUV4MPEG2 stream
po2debconf - merge master templates file and PO files
pod2html - convert .pod files to .html files
pod2latex - convert pod documentation to latex format
pod2man - Convert POD data to formatted *roff input
pod2text - Convert POD data to formatted ASCII text
pod2usage - print usage messages from embedded pod docs in files
podchecker - check the syntax of POD format documentation files
podebconf-display-po - display content of a PO file in a debconf
podebconf-report-po - send outdated debconf PO files to the last
podselect - print selected sections of pod documentation on standard
pointer-capture-applet - Creates an area on the panel to capture the
policytool - PolicyTool Administration GUI Utility
polipo - a caching web proxy
pon, poff, plog - starts up, shuts down or lists the log of PPP connec
pon.wvdial - A pon replacement.
pooltype - display a WEB pool file
portmap - DARPA port to RPC program number mapper
poster - Scale and tile a postscript image to print on multiple pages
ppdc - cups ppd compiler
ppdhtml - cups html summary generator
ppdi - import ppd files
ppdmerge - merge ppd files
ppdpo - cups message catalog generator
ppm3d - convert two portable pixmap into a red/blue 3d glasses pixmap
ppmbrighten - change an images Saturation and Value from an HSV map
ppmchange - change all pixels of one color to another in a portable
ppmcie - draw a CIE color chart as a PPM image
ppmcolormask - produce mask of areas of a certain color in a PPM file
ppmcolors - generate a color map of all colors of a certain maxval
ppmdim - dim a portable pixmap down to total blackness
ppmdist - simplistic grayscale assignment for machine generated, color
ppmdither - ordered dither for color images
ppmfade - generate a transition between two image files using special
ppmflash - brighten a picture up to complete white-out
ppmforge - fractal forgeries of clouds, planets, and starry skies
ppmhist - print a histogram of a portable pixmap
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ppmlabel - add text to a portable pixmap  
ppmmake - create a pixmap of a specified size and color  
ppmmix - blend together two portable pixmaps  
ppmntsc - make a portable pixmap look like taken from an American TV  
ppmpat - make a pretty pixmap  
ppmquantall - run ppmquant on a bunch of files all at once, so they  
ppmquant - quantize the colors in a portable pixmap down to a specified  
ppmqvga - 8 plane quantization  
ppmrainbow - Generate a rainbow  
ppmrelief - run a Laplacian relief filter on a portable pixmap  
ppmshadow - add simulated shadows to a portable pixmap image  
ppmshift - shift lines of a portable pixmap left or right by a random  
ppmspread - displace a portable pixmaps pixels by a random amount  
ppmtoacad - convert portable pixmap to AutoCAD database or slide  
ppmtobmp - convert a portable pixmap into a BMP file  
ppmtoeyuv - convert a portable pixmap into a Berkeley YUV file  
ppmtogif - convert a portable pixmap into a GIF file  
ppmtoicr - convert a portable pixmap into NCSA ICR format  
ppmtoilbm - convert a portable pixmap into an ILBM file  
ppmtoleaf - convert portable pixmap to Interleaf image format  
ppmtolj - convert a portable pixmap to an HP LaserJet PCL 5 Color file  
ppmtolss16 Convert a PPM to an LSS16 image  
ppmtomap - extract all colors from a portable pixmap  
ppmтомitsu - convert a portable pixmap to a Mitsubishi S340-10 file  
ppmtompeg - encodes MPEG-1 bitstreams  
ppmtoneo - convert a portable pixmap into an Atari Neochrome .neo file  
ppmtopcx - convert a portable pixmap into a PCX file  
ppmtopgm - convert a portable pixmap into a portable graymap  
ppmtoi1 - convert a portable pixmap into an Atari Degas .pi1 file  
ppmtopic - convert a portable pixmap into a Macintosh PICT file  
ppmtopj - convert a portable pixmap to an HP PaintJet file  
ppmtopuzz - convert a portable pixmap into an X11 "puzzle" file  
ppmtorgb3 - separate a portable pixmap into three portable graymaps  
ppmtosixel - convert a portable pixmap into DEC sixel format  
ppmtotga - convert portable pixmap into a TrueVision Targa file  
ppmtouil - convert a portable pixmap into a Motif UIL icon file  
ppmtowinicon - convert 1 or more portable pixmaps into a Windows .ico  
ppmtoxpm - convert a portable pixmap into an X11 pixmap  
ppmtoy4m - Convert PPM images to YUV4MPEG2 stream  
ppmtoyuv - convert a portable pixmap into an Abekas YUV file  
ppmtoyuvsplit - convert a portable pixmap into 3 subsampled raw YUV  
ppmtv - make a portable pixmap look like taken from an American TV  
pppd - Point-to-Point Protocol Daemon  
pppdump - convert PPP record file to readable format  
pppoe-discovery - perform PPPoE discovery  
pppstats - print PPP statistics  
pr - convert text files for printing  
prezip-bin - prefix zip delta word list compressor/decompressor  
printafm - Print the metrics from a Postscript font in AFM format using  
printconf - automatically configure attached USB and parallel printers

printenv - print all or part of environment  
printf - format and print data  
procmail - autonomous mail processor  
prove -- A command-line tool for running tests against Test::Harness  
ps2ascii - Ghostscript translator from PostScript or PDF to ASCII  
ps2eps - convert PostScript to EPS (Encapsulated PostScript) files  
ps2epsi - generate conforming Encapsulated PostScript  
ps2pdf - Convert PostScript to PDF using ghostscript  
ps2pdfwr - Convert PostScript to PDF without specifying Compatibil  
ps2ps, eps2eps - Ghostscript PostScript "distiller"  
ps4pdf - a shell script for creating .pdf from .tex  
psbook - rearrange pages in PostScript file into signatures  
psed - a stream editor  
psfaddtable - add a Unicode character table to a console font  
psfgettable - extract the embedded Unicode character table from a con  
psfstriptable - remove the embedded Unicode character table from a con  
psidtopgm - convert PostScript "image" data into a portable graymap  
pslatex - utility to typeset LaTeX files using PostScript fonts  
psmandup - print duplex on non duplex printers  
psmerge - filter to merge several PostScript files into one  
psnup - multiple pages per sheet  
ps - report a snapshot of the current processes.  
psresize - rescales and centers a document for new output paper size  
psselect - select pages from a PostScript file  
psset - insert page device request in PostScript files  
pstoppnm - convert a PostScript file into a portable anymap  
pstops - shuffle pages in a PostScript file  
pstree - display a tree of processes  
ptar - a tar-like program written in perl  
ptardiff - program that diffs an extracted archive against an  
ptked - an editor in Perl/Tk  
ptksh - Perl/Tk script to provide a graphical user interface for  
ptx - produce a permuted index of file contents  
pumount - umount arbitrary hotpluggable devices as normal user  
pwck - verify integrity of password files  
pwconv, pwunconv, grpconv, grpuconv - convert to and from shadow  
pwd - print name of current/working directory  
pwdx - report current working directory of a process  
pycentral - register and build utility for Python packages  
py\_compilefiles - byte-compile python .py files  
pydoc2.5 - the Python documentation tool  
pygettext - Python equivalent of xgettext(1)  
pyntor-components - manage components for the presentation program Pyn  
pyntor - modular slides viewer and presentation tool  
pyntor-selfrun - creation of self-extracting presentation archives  
pysupport-movemodules - move python modules and extensions for python-  
pysupport-parseversion - parse python-support version information files  
python - an interpreted, interactive, object-oriented programming lan  
pyversions - print python version information  
qembed - Converts arbitrary files into C++ code.

qiv - a fast gdk/imlib image viewer for X. Version: 2.1-pre11,  
qrto ppm - convert output from the QRT ray tracer into a portable  
qtconfig - Configuration tool for Qt  
querybts - view outstanding bug reports on a debbugs server  
ranlib - generate index to archive.  
rar - archive files with compression  
rarp - manipulate the system RARP table  
rasttopnm - convert a Sun rasterfile into a portable anymap  
raw - bind a Linux raw character device  
rawtopgm - convert raw grayscale bytes into a portable graymap  
rawtoppm - convert raw RGB bytes into a portable pixmap  
rbash - restricted bash, see bash(1)  
rdesktop - Remote Desktop Protocol client  
rdev - query/set image root device, RAM disk size, or video mode  
rdjpgcom - display text comments from a JPEG file  
readelf - Displays information about ELF files.  
readlink - display value of a symbolic link  
readom - read or write data Compact Discs  
readprofile - a tool to read kernel profiling information  
rearj - Converts other archive formats to .arj files  
recode-sr-latin - convert Serbian text from Cyrillic to Latin script  
recountdiff - recompute patch counts and offsets  
rediff, editdiff - fix offsets and counts of a hand-edited diff  
refer - preprocess bibliographic references for groff  
remove-default-ispell - remove default ispell dictionary  
remove-default-wordlist - remove default wordlist  
remove-shell - remove shells from the list of valid login shells  
rename - Rename files  
rename - renames multiple files  
renice - alter priority of running processes  
replace - a string-replacement utility  
reportbug - reports a bug to a debbugs server  
report-hw - dump information on the systems hardware  
resize2fs - ext2/ext3 file system resizer  
resize - set TERMCAP and terminal settings to current xterm window size  
resolveip - resolve hostname to IP address or vice versa  
resolve\_stack\_dump - resolve numeric stack trace dump to symbols  
rev - reverse lines of a file or files  
rgb2pat - Converts an image file from 24-bit RGB to PAT format.  
rgb3toppm - combine three portable graymaps into one portable pixmap  
richtext - View a richtext document, typically a mail message  
rletopnm - convert a Utah Raster Tools RLE image file into a PNM image  
rmdir - remove empty directories  
rmid - The Java RMI Activation System Daemon  
rmiregistry - The Java Remote Object Registry  
rmmod simple program to remove a module from the Linux Kernel  
rm - remove files or directories  
rmt - remote magtape protocol module  
rnano - Restricted mode for Nanos ANOther editor, an enhanced free  
rotatelogs - Piped logging program to rotate Apache logs

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routel - list routes with pretty output format
route - show / manipulate the IP routing table
rpcclient - tool for executing client side MS-RPC functions
rpcdebug - set and clear NFS and RPC kernel debug flags
rpcgen - an RPC protocol compiler
rpc.gssd - rpcsec_gss daemon
rpc.idmapd - NFSv4 ID <-> Name Mapper
rpcinfo - report RPC information
rpc.statd - NSM status monitor
rpl8 - Firmware loader for DVD drives
rstart - a sample implementation of a Remote Start client
rstartd - a sample implementation of a Remote Start rsh helper
rsync a fast, versatile, remote (and local) file-copying tool
rsyslogd - reliable and extended syslogd
rtcwake - enter a system sleep state until specified wakeup time
rtmon - listens to and monitors RTnetlink
runcon - run command with specified security context
runlevel -- find the previous and current system runlevel.
run-mailcap, view, see, edit, compose, print - execute programs via
run-parts - run scripts or programs in a directory
runscript - script interpreter for minicom
run-with-aspell - script to help use GNU Aspell as an ispell replace
rx, rb, rz - XMODEM, YMODEM, ZMODEM (Batch) file receive
s5 - set up and update S5 presentations
safe_finger - finger client wrapper that protects against nasty stuff
savelog - save a log file
saveme - unlink ld.so.preload
saytime - audio time check
sbigtogm - convert an SBIG CCDOPS file into a portable graymap
scp - secure copy (remote file copy program)
screendump - dump the contents of a virtual console to stdout
script - make typescript of terminal session
scriptreplay - play back typescripts, using timing information
sdiff - side-by-side merge of file differences
seahorse-agent - seahorse pass phrase caching agent
seahorse-daemon - seahorse pass phrase caching agent
seahorse-tool - PGP/GnuPG file encryption for the GNOME Desktop
sed - stream editor for filtering and transforming text
select-default-isPELL - select default isPELL dictionary
select-default-iwrap - Selects the user default isPELL dictionary for
select-default-wordlist - select default wordlist
sensible-editor, sensible-pager, sensible-browser - sensible editing,
seq - print a sequence of numbers
servertool - The Java(TM) IDL Server Tool
services-admin - Services Administration Tool
sessreg - manage utmp/wtmp entries for non-init clients
setarch - change reported architecture in new program environment and
seticons - sets the icon images used in Window Maker
setkeycodes - load kernel scancode-to-keycode mapping table entries
setleds - set the keyboard leds
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setlogcons - Send kernel messages to console N  
setmetamode - define the keyboard meta key handling  
setpci - configure PCI devices  
setsid - run a program in a new session  
setstyle - set style related options for Window Maker or loads a theme  
setterm - set terminal attributes  
setvesablank - Turn VESA screen blanking on or off  
setxkbmap - set the keyboard using the X Keyboard Extension  
sfdisk - Partition table manipulator for Linux  
sftp - secure file transfer program  
sg - execute command as different group ID  
sgitopnm - convert a SGI image file to a portable anymap  
sha1sum - compute and check SHA1 message digest  
sha224sum - compute and check SHA224 message digest  
sha256sum - compute and check SHA256 message digest  
sha384sum - compute and check SHA384 message digest  
sha512sum - compute and check SHA512 message digest  
shadowconfig - toggle shadow passwords on and off  
shar - create shell archives  
shares-admin - Shared Folders Administration Tool  
shasum - Print or Check SHA Checksums  
sh - command interpreter (shell)  
showaudio - Play an audio email message  
showcfont - displays all characters in the current screen-font.  
showchar - show character with information  
showexternal - Fetch and display the body of a mail message that is  
showfont - font dumper for X font server  
showkey - examine the scan codes and keycodes sent by the keyboard  
showmount - show mount information for an NFS server  
shownonascii - View all or part of a mail message in a non-ASCII font  
showpartial - Fetch and display the body of a mail message that is  
showpicture - View an image received in the mail  
showrgb - uncompile an rgb color-name database  
shred - overwrite a file to hide its contents, and optionally delete it  
shuf - generate random permutations  
shutdown - bring the system down  
sigtool - signature and database management tool  
simpdftex - create pdf files via latex-dvips-gs instead of pdflatex  
sirtopnm - convert a Solitaire file into a portable anymap  
size - list section sizes and total size.  
skill, snice - send a signal or report process status  
slabtop - display kernel slab cache information in real time  
slattach - attach a network interface to a serial line  
sldtoppm - convert an AutoCAD slide file into a portable pixmap  
sleep - delay for a specified amount of time  
sliceprint - slice documents with long lines.  
smartctl - Control and Monitor Utility for SMART Disks  
smartd - SMART Disk Monitoring Daemon  
smbcacls - Set or get ACLs on an NT file or directory names  
smbclient - ftp-like client to access SMB/CIFS resources on servers

smbcquotas - Set or get QUOTAs of NTFS 5 shares  
smbget - wget-like utility for download files over SMB  
smbpasswd - change a users SMB password  
smbspool - send a print file to an SMB printer  
smbtar - shell script for backing up SMB/CIFS shares directly to UNIX  
smbtree - A text based smb network browser  
smproxy - Session Manager Proxy  
socat - Multipurpose relay (SOcket CAT)  
soelim - interpret .so requests in groff input  
sort - sort lines of text files  
sound-juicer - GNOME-desktop CD ripper and player using GStreamer  
SoX - Sound eXchange, the Swiss Army knife of audio manipulation  
spawn-fcgi - Spawns FastCGI processes  
spctoppm - convert an Atari compressed Spectrum file into a portable  
speaker-test - command-line speaker test tone generator for ALSA  
splitdiff - separate out incremental patches  
splitfont - extract characters from an ISO-type font.  
splitmail - Split a large mail message into MIME-compliant partial mes  
split - split a file into pieces  
sprof - Read and display shared object profiling data  
sputoppm - convert an Atari uncompressed Spectrum file into a portable  
sqlite3 - A command line interface for SQLite version 3  
sqlite - A command line interface for SQLite  
sq - squeeze a sorted word list unsq - unsqueeze a sorted word list  
ss - another utility to investigate sockets  
ssconvert - a command line spreadsheet format converter  
ssh-add - adds RSA or DSA identities to the authentication agent  
ssh-agent - authentication agent  
ssh-argv0 - replaces the old ssh command-name as hostname handling  
ssh-copy-id - install your public key in a remote machines autho  
sshd - OpenSSH SSH daemon  
ssh-keygen - authentication key generation, management and conversion  
ssh-keyscan - gather ssh public keys  
ssh - OpenSSH SSH client (remote login program)  
ssh-vulnkey - check blacklist of compromised keys  
ssindex - generate index data for spreadsheet files  
st4topgm - convert an SBIG ST4 format file into a portable graymap  
startpar - start runlevel scripts in parallel  
start-stop-daemon - start and stop system daemon programs  
startx - initialize an X session  
stat - display file or file system status  
states - awk alike text processing tool  
stream - a lightweight tool to stream one or more pixel components of  
strings - print the strings of printable characters in files.  
strip - Discard symbols from object files.  
stty - change and print terminal line settings  
su - change user ID or become superuser  
sudo, sudoedit - execute a command as another user  
sulogin - Single-user login  
sum - checksum and count the blocks in a file

su-to-root - A simple script to give an interactive front-end to su.  
svnadmin - Subversion repository administration tool  
svndumpfilter - Filter a subversion repository dumpfile.  
svnlook - Subversion repository examination tool  
svnserve - Server for the svn repository access method  
svn - Subversion command line client tool  
svnsync - Subversion repository synchronization tool  
svnversion - Produce a compact version number for a working copy.  
swapon, swapoff - enable/disable devices and files for paging and swap  
swfdec-player - Viewer for Flash files  
swfdec-thumbnailer - Create a thumbnail for a Flash file  
sx, sb, sz - XMODEM, YMODEM, ZMODEM file send  
sylpheed - Light weight e-mail client using GTK+  
synaptic - graphical management of software packages  
sync - flush file system buffers  
synclient - query and modify Synaptics TouchPad driver for XOrg/XFree86  
syndaemon - a program that monitors keyboard activity and disables the  
sysctl - configure kernel parameters at runtime  
syslinux2ansi - converts a syslinux-format screen to pc-ansi  
syslinux - install the SYSLINUX bootloader on a FAT filesystem  
syslog2eximlog - make syslog output suitable for eximstats  
system-tools-backends - message dispatcher for system-tools-backends  
tabs - set tabs on a terminal  
tac - concatenate and print files in reverse  
tailf - follow the growth of a log file  
tail - output the last part of files  
tangle - translate WEB to Pascal  
tar - The GNU version of the tar archiving utility  
taskjuggler - translates project descriptions into HTML or XML reports  
TaskjugglerUI - a KDE graphical front-end for taskjuggler  
tasksel - a user interface for installing tasks  
taskset - retrieve or set a processs CPU affinity  
tbl - format tables for troff  
tclsh - Simple shell containing Tcl interpreter  
tcpd - access control facility for internet services  
tcpdchk - tcp wrapper configuration checker  
tcpdmatch - tcp wrapper oracle  
tc - show / manipulate traffic control settings  
tee - read from standard input and write to standard output and files  
telnet - user interface to the TELNET protocol  
tempfile - create a temporary file in a safe manner  
test - check file types and compare values  
testparm - check an smb.conf configuration file for internal  
texconfig - configures teTeX  
texconfig-dialog - helper program for texconfig and texconfig-sys  
texdoctk - GUI for easier access of TeX package and program documenta  
texdoc - Utility to look up TeX documentation  
texi2dvi4a2ps - Compile Texinfo and LaTeX files to DVI or PDF  
texi2dvi - convert Texinfo documents to DVI  
texi2pdf - create a PDF file from a Texinfo file

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texindex - sort Texinfo index files
texlinks - maintain symbolic links from format to engine
text2wave - convert text to .wav files
tex, virtex, initex - text formatting and typesetting
tfmtodit - create font files for use with groff -Tdvi
tga2ppm - convert TrueVision Targa file into a portable pixmap
tgz
thinkjettopbm - convert HP ThinkJet printer commands file to PBM
thumbpdf - generate thumbnail images for a PDF file created with pdftex
tic - the terminfo entry-description compiler
tie - merge or apply WEB change files
tiff2pnm - convert a TIFF file into a portable anymap
time-admin - Time Administration Tool
time - run programs and summarize system resource usage
tixindex - build tclIndex file for the Tix widgets
tkjpeg - simple JPEG viewer using perl/Tk
tload - graphic representation of system load average
toc2cddb - translates a TOC file of cdrdao(1) into a cddb file and
toc2cue - converts a TOC files of cdrdao(1) into a .cue file
toe - table of (terminfo) entries
toolame - MPEG-1 layer 2 audio encoder
top - display Linux tasks
tor-gencert - Generate certs and keys for Tor directory authorities
torify - wrapper for tsocks and tor
tor-resolve - resolve a hostname to an IP address via tor
tor - The second-generation onion router
totem - GNOME-desktop movie player based on the xine backend
touch - change file timestamps
tput, reset - initialize a terminal or query terminfo database
traceroute - print the route packets trace to network host
troff - the troff processor of the groff text formatting system
tr - translate or delete characters
true - do nothing, successfully
try-from - test program for the tcp_wrapper
tsclient - Terminal Server Client supporting XDMCP, VNC and RDP
tset, reset - terminal initialization
tsocks - Shell wrapper to simplify the use of the tsocks(8) library to
tsort - perform topological sort
tty - print the file name of the terminal connected to standard input
tune2fs - adjust tunable filesystem parameters on ext2/ext3 filesystems
tunelp - set various parameters for the lp device
twm - Tab Window Manager for the X Window System
tzselect - view timezones
ucfq - query the ucf database
ucfr - Update Configuration File Registry: associate packages with
ucf - Update Configuration File: preserve user changes in configura
ucs2any - generate BDF fonts containing subsets of ISO 10646-1 code
udevadm - udev management tool
udevd - event managing daemon
uic - Qt user interface compiler
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ul - do underlining  
umount.nfs, umount.nfs4 - unmount a Network File System  
umount - unmount file systems  
uname - print system information  
undocumented - No manpage for this program.  
unexpand - convert spaces to tabs  
unicode\_start - put the console in Unicode mode.  
unicode\_stop - put the console out of unicode mode (ie. in 8-bit mode).  
uniq - report or omit repeated lines  
unix\_chkpwd - Helper binary that verifies the password of the current user  
unix\_update - Helper binary that updates the password of a given user  
unlink - call the unlink function to remove the specified file  
unpack200 - JAR Unpacking tool  
unrar - extract files from rar archives  
unshar - unpack a shar file  
unwrapdiff - demangle word-wrapped patches  
unzip - list, test and extract compressed files in a ZIP archive  
unzipsfx - self-extracting stub for prepending to ZIP archives  
update-aide.conf - build run-time AIDE configuration  
update-alternatives - maintain symbolic links determining default command  
update-app-install - Cache the data for gnome-app-install  
update-auctex-elisp - update AUCTeX automatically generated TeX macros  
update-auctex-install - update AUCTeX installation.  
update-binfmts - maintain registry of executable binary formats  
update-ca-certificates - update /etc/ssl/certs and certificates.crt  
update-catalog - create or update entry in SGML catalog file  
updatedb - update a database for mlocate  
update-default-ispell - update default ispell dictionary  
update-default-wordlist - update default wordlist  
update-dictcommon-aspell - rebuild aspell database and emacs stuff  
update-exim4.conf - Generate exim4 configuration files.  
update-exim4.conf.template - Regenerate exim4 configuration file template  
update-exim4defaults - Manage exim4 daemon default file.  
update-fonts-alias - compile fonts.alias files  
update-fonts-dir - compile fonts.dir files  
update-fonts-scale - generate fonts.scale files  
update-gconf-defaults - generate GConf defaults shipped in Debian package  
update-gdkpixbuf-loaders - Update wrapper script for the Gdkpixbuf loaders  
update-grub - program to generate GRUBs menu.lst file  
update-gtk-immodules - Update wrapper script for the GTK+ IM modules  
update-icon-caches - Update wrapper script for the icon caches  
update-inetd - create, remove, enable or disable entry in  
update-initramfs - generate an initramfs image  
update-ispell-dictionary - Bash script to select a new ispell default  
update-java-alternatives - update alternatives for jre/sdk installations  
update-locale - Modify global locale settings  
Update Manager - apt update application for GNOME  
update-menus - generate Debian menu system  
update-mime - create or update MIME information  
update-mime-database - a program to build the Shared MIME-Info database

update-modules - obsolete command  
update-notifier - Notifies about package updates  
update-openoffice-dicts - rebuild dictionary.lst for OpenOffice.org  
update-pangox-aliases - Update wrapper script for the Pango X aliases  
update-passwd - safely update /etc/passwd, /etc/shadow and /etc/group  
update-pciids - download new version of the PCI ID list  
update-python-modules - byte-compile python modules  
update-rc.d - install and remove System-V style init script links  
update-texmf - shell script to generate /etc/texmf/texmf.cnf  
update-updmap, update-language, update-fmtutil, update-fontlang -  
update-usbids - download new version of the USB ID list  
update-xmlcatalog - maintain XML catalog files  
update-xpdfrc - program to generate xpdfs configuration file  
updmap - Update font map files for TeX output drivers.  
upgrade-windowmaker-defaults - Convert old wmaker configuration files  
uptime - Tell how long the system has been running.  
usb\_printerid - part of the printer driver foo2zjs  
useradd - create a new user or update default new user information  
userdel - delete a user account and related files  
usermod - modify a user account  
users-admin - Users Administration Tool  
users - print the user names of users currently logged in to the cur  
uudepipe - uudecode a file  
uuencode, uudecode - encode a binary file, or decode its representation  
uuenpipe - uuencode a file  
uxterm - X terminal emulator for Unicode (UTF-8) environments  
uz - gunzips and extracts a gzipd tard archive  
validlocale - Test if a given locale is available  
vbetool - run real-mode video BIOS code to alter hardware state  
vcstime - Show time in upper right hand corner of the console screen  
vcut - cuts Ogg Vorbis files  
vdir - list directory contents  
viewres - graphical class browser for Xt  
vimdiff - edit two or three versions of a file with Vim and show dif  
vimtutor - the Vim tutor  
vim - Vi IMproved, a programmers text editor  
vinagre - a VNC client for the GNOME Desktop  
vipw, vigr - edit the password, group, shadow-password or shadow-group  
visgrep - Visual grep, greps for images in another image  
visudo - edit the sudoers file  
vlc, wxvlc, svlc - the VLC media player  
vmstat - Report virtual memory statistics  
vol\_id - probe filesystem type and read label and uuid  
volname - return volume name  
vorbiscomment - List or edit comments in Ogg Vorbis files  
vorbistagedit - allows batch editing of vorbis comments with an editor  
vpddecode - VPD structure decoder  
vt-is-UTF8 - check whether current VT is in UTF8- or byte-mode.  
vumeter - Sound volume meter  
w3m - a text based Web browser and pager

w3mman - an interface to the on-line reference manuals by w3m(1)  
wall - write a message to users  
Wand-config - get information about the installed version of the Magick  
watch - execute a program periodically, showing output fullscreen  
wbmptopbm - convert a wireless bitmap (wbmp) file to a portable bitmap  
wc - print newline, word, and byte counts for each file  
wdiff - display word differences between text files  
wdwrite - writes keys and values to the defaults database  
weave - translate WEB to TeX  
wftopfa - Convert a Wadalab base font to Postscript .PFA (or .PFB) for  
Wget - The non-interactive network downloader.  
whatis - display manual page descriptions  
whereis - locate the binary, source, and manual page files for a com  
which - locate a command  
whiptail - display dialog boxes from shell scripts  
whoami - print effective userid  
whois - client for the whois directory service  
who - show who is logged on  
wicd-client - frontend to the WICD daemon  
wicd-curses - curses-based wicd(8) controller  
Wicd - Wired and Wireless Network Connection Manager  
widget - Demonstration of Perl/Tk widgets  
winicontoppm - convert a Windows .ico file into 1 or more portable  
wipe - securely erase files from magnetic media  
wmagnify - magnify parts of the screen  
wmaker - X11 window manager with a NEXTSTEP look  
wmsetbg - sets the background on the X11 display  
wodim - write data to optical disk media  
word-list-compress - word list compressor/decompressor for GNU Aspell  
wpa\_action - wpa\_cli action script  
wpa\_cli - WPA command line client  
wpa\_passphrase - Generate a WPA PSK from an ASCII passphrase for a SSID  
wpa\_supplicant - Wi-Fi Protected Access client and IEEE 802.1X suppli  
WPrefs - Window Maker configuration tool  
write - send a message to another user  
writevt - put text into the input buffer of a virtual terminal  
wrjpgcom - insert text comments into a JPEG file  
w - Show who is logged on and what they are doing.  
wvdialconf - build a configuration file for wvdial(1)  
wvdial - PPP dialer with built-in intelligence.  
wxcopy - copy stdin or file into cutbuffer  
wpaste - output a cutbuffer to stdout  
x11perfcomp - X11 server performance comparison program  
x11perf - X11 server performance test program  
xargs - build and execute command lines from standard input  
xaumix - aumix wrapper for X  
xauth - X authority file utility  
xbiff - mailbox flag for X  
xbmptopbm - convert an X11 or X10 bitmap into a portable bitmap  
xbsh - BeanShell: A Java scripting environment (windowed version).

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xcalc - scientific calculator for X
xclipboard - X clipboard client
xclock - analog / digital clock for X
xcmsdb - Device Color Characterization utility for X Color Management
xconsole - monitor system console messages with X
xcursorgen - create an X cursor file from a collection of PNG images
xcutsel - interchange between cut buffer and selection
xdg-desktop-icon - command line tool for (un)installing icons to the
xdg-desktop-menu - command line tool for (un)installing desktop menu
xdg-email - command line tool for sending mail using the users
xdg-icon-resource - command line tool for (un)installing icon resources
xdg-mime - command line tool for querying information about file type
xdg-open - opens a file or URL in the users preferred application
xdg-screensaver - command line tool for controlling the screensaver
xditview - display ditroff output
xdpyinfo - display information utility for X
xdriinfo - query configuration information of DRI drivers
xdvi - DVI Previewer for the X Window System
xev - print contents of X events
xeyes - a follow the mouse X demo
xfd - display all the characters in an X font
xfontsel - point and click selection of X11 font names
xfsinfo - X font server information utility
xft-config - report Xft version, compiler, linker, and/or installation
xgamma - Alter a monitors gamma correction through the X server
xgc - X graphics demo
xgettext - extract gettext strings from source
xhost - server access control program for X
ximtoppm - convert an Xim file into a portable pixmap
xine-list-1.1 - get supported filetype information from xine-lib
xinit - X Window System initializer
xinput - utility to configure and test XIInput devices
XkbBell - Rings the bell on the default keyboard
xkbcomp - compile XKB keyboard description
xkbevd - XKB event daemon
xkbprint - print an XKB keyboard description
xkill - kill a client by its X resource
xload - system load average display for X
xlogo - X Window System logo
xlsatoms - list interned atoms defined on server
xlsclients - list client applications running on a display
xlsfonts - server font list displayer for X
xmagnify - magnify parts of the screen
xman - Manual page display program for the X Window System
xmessage - display a message or query in a window (X-based /bin/echo)
xminicom - friendly serial communication program
xml2po - program to create a PO-template file from a DocBook XML file
xmlcatalog - Command line tool to parse and manipulate XML or SGML
xml-config - script to get information about the installed version of
xmllint - command line XML tool
```

xmodmap - utility for modifying keymaps and pointer button mappings in  
xmore - plain text display program for the X Window System  
xmousepos - Gets and prints the current mouse position  
Xorg - X11R7 X server  
xournal - GTK+ Application for note taking  
xpaint - Simple Paint program  
xpdf - Portable Document Format (PDF) file viewer for X (version 3.02)  
xpmtoppm - convert an X11 pixmap into a portable pixmap  
xprop - property displayer for X  
xqxdecode - Decode a XQX stream into human readable form.  
xrandr - primitive command line interface to RandR extension  
xrdb - X server resource database utility  
xrefresh - refresh all or part of an X screen  
xsane - scanner frontend for SANE  
xsetmode - set the mode for an X Input device  
xsetpointer - set an X Input device as the main pointer  
xsetroot - root window parameter setting utility for X  
xset - user preference utility for X  
xsltproc - command line XSLT processor  
xsm - X Session Manager  
xstdcmap - X standard colormap utility  
xsubpp - compiler to convert Perl XS code into C code  
xte - Generates fake input using the XTest extension  
xterm - terminal emulator for X  
xtrapreset, xtrapinfo, xtrapstats, xtrapout, xtrapin, xtrapchar, xtrap  
xvidtune - video mode tuner for Xorg  
xvinfo - Print out X-Video extension adaptor information  
xvminitoppm - convert a XV "thumbnail" picture to PPM  
xwd - dump an image of an X window  
xwdtopnm - convert a X11 or X10 window dump file into a portable anymap  
xwininfo - window information utility for X  
xwud - image displayer for X  
xxd - make a hexdump or do the reverse.  
xzgv - picture viewer for X, with thumbnail-based file selector  
y4mcolorbars - Create a YUV4MPEG2 stream containing a colorbar test  
y4mdenoise - Motion-compensating YUV4MPEG-frame denoiser  
y4mtonpm - Convert a YUV4MPEG2 stream to PNM images  
y4mtoppm - Convert YUV4MPEG2 stream to PPM images  
y4munsharp - Unsharp filter for YUV4MPEG2 streams  
ybmtopbm - convert a Bennet Yee "face" file into a portable bitmap  
yelp browse system documentation  
yes - output a string repeatedly until killed  
yuv2lav - encodes lavtools raw YUV frame streams into MJPEG files  
YUV4MPEG2 - video stream format used by pipe-based MJPEGtools  
yuvdenoise - Motion-Compensating-YUV4MPEG2-frame-denoiser  
yuvfps - Converts to a different frame rate  
yuvinactive - Set a part of the video to a defined state  
yuvkineco - revert 2-3 pulldown movie  
yuvmedianfilter - A filter for yuv images produced by the mjpeg tools  
yuvplay - Display YUV4MPEG2 streams (using SDL)

yuvscaler - UPscales or DOWNscales a YUV4MPEG2 stream to a specified  
yuvspitto ppm - convert a Y- and a U- and a V-file into a portable  
yutoppm - convert Abekas YUV bytes into a portable pixmap  
yuvycsnoise - Noise filter specialized for NTSC Y/C separation noise  
zcmp, zdiff - compare compressed files  
zdump - time zone dumper  
zeisstopnm - convert a Zeiss confocal file into a portable anymap  
zenity - display GTK+ dialogs  
zforce - force a .gz extension on all gzip files  
zgrep - search possibly compressed files for a regular expression  
zic - time zone compiler  
zipgrep - search files in a ZIP archive for lines matching a pattern  
zipinfo - list detailed information about a ZIP archive  
zip, zipcloak, zipnote, zipsplit - package and compress (archive) files  
zjsdecode - Decode a ZjStream into human readable form.  
zless - file perusal filter for crt viewing of compressed text  
zmore - file perusal filter for crt viewing of compressed text  
znew - recompress .Z files to .gz files  
zsoelim - satisfy .so requests in roff input  
7zr - A file archiver with highest compression ratio  
822-date - Print date and time in RFC2822 format

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