

Summary of UNIX commands

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df [*dirname*] display free disk space. If *dirname* is omitted, display all available disks. The output maybe in blocks or in Kbytes. Use **df -k** in Solaris.

du [*dirname*] display disk usage.

less *filename* display *filename* one screenfull. A pager similar to (better than) **more**.

ls [*dirname*] list the content of directory *dirname*. Options: **-a** display hidden files, **-l** display in long format

mkdir *dirname* make directory *dirname*

more *filename* view file *filename* one screenfull at a time

mv *oldname newname* rename file *oldname* to file *newname*. If *newname* is a directory, then move *oldname* into directory *newname*.

pg *filename* view *filename* one screenfull at a time (a pager).

pwd print working directory

rmdir *dirname* remove directory *dirname* (if *dirname* is empty).

rm *file1 [file2 ...]* remove files *file1*, *file2*, etc.

rm -r *dirname* remove *dirname* recursively, removing all files and subdirectories underneath *dirname*.

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1. Directory and file commands

cat *filename*

display the content of file *filename*

cd [*dirname*]

change directory to *dirname*. If *dirname* is omitted, change to your home directory.

cp *source destination*

copy file *source* into file *destination*.

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This is a summary of UNIX commands available on most UNIX systems. Depending on the configuration, some of the commands may be unavailable on your site. These commands may be a commercial program, firmware or public domain program that must be installed separately, or probably just not in your search path. Check your local documentation or manual pages for more details (e.g. man program-name). This reference card, obviously, cannot describe all UNIX commands in details, but instead I picked commands that are useful and interesting from a user's point of view.

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bold

represents program name

dirname

represents directory name as an argument

filename

represents file name as an argument

[*dirname*]

optional directory name (or other optional argument) as argument. If it is not given, the current directory will be used.

2. Print-related commands

which *commandname*
show the location of commandname

lpq *[-Pprintername]*
query printer queue of the default printer. If printername is given, will query printer-printername.
name.

lprm *[-Pprintername] jobnum*

remove printing job number jobnum from printer-printername.

lpstat
check printer status (HP-UX, Solaris 2.x)

3. Miscellaneous commands

env
print or alter environment variables hostname
display host name

man *topic*
display on-line manual on topic.

screen
create multiple screen with one physical screen. This program is useful if you have a text-only (e.g. vt100) terminal. Move around with control-A.

uname
print system name

users
display all users on-line

w
check who is doing what

2. Print-related commands

which *commandname*

show the location of commandname

who

who is on-line on this machine

4. Process management

kill *SIGNAL PID*

Send signal SIGNAL to process ID PID, or kill (terminate) process with process ID number PID. For example:

kill -HUP 5555

run program programname with lower priority (nicer to other users). Recommended for running background processes.

ps

check processes. The options for this command depends on the version and variation of your UNIX. Check your local documentation.

top

show (continously) what process(es) is running.

5. File archive and compression

compress *filename*

make filename smaller (compression). filename will be replaced by filename.Z (a .Z extension is added).

gunzip *filename.gz*

expand filename.gz into its original form (size) and remove the .gz extension. This is GNU un-

gzip *filename*

compress filename with GNU zip (gzip) and add .gz extension

2. Print-related commands

tar

combine files into one tar file, or extract files from a tar file. A tar file could be a device (magnetic tape as /dev/rst0) or a plain file. To extract filename.tar

tar xvf filename.tar

To combine all files under dirname into filename.tar:
tar cvf filename.tar dirname

uncompress *filename.Z*

expand filename.Z into its original size and remove the .Z extension

unarf *filename.arj*

extract files from an ARJ archive

unzip *filename.zip*

extract files from filename.zip. The reverse of zip command.

zip *zipname files*

create an archive file (and compress it) called zipname.zip which contains files.

MTTOOLS

There is a set of commands to access MS-DOS disks on systems equipped with floppy disk. Most DOS file commands are available (prefixed with 'm'):
copy, mdel, mkdir, mmd, mtype, etc.

6. Text editors

asWedit [*filename*] HTML editor

axe [*filename*] a simple X window text editor

elvis [*filename*] a vi clone

emacs [*filename*] start emacs. A more extensive documentation is available on-line. Reference card for GNU emacs is also available from FSF GNU emacs distribution.

gvim [*filename*] X11 gui version of vim

jed [*filename*] jed text editor

joe [*filename*] a WordStar-like editor

nedit [*filename*] a Motif-based text editor

textedit [*filename*] OpenWindows text editor

vi [*filename*] vi editor

vim [*filename*] a vi-clone

xedit [*filename*] a simple X window text editor

xemacs [*filename*] X window Emacs (formerly Lucid Emacs)

7. Mail Programs

biFF notify new mail has arrived

elm read and/or compose e-mail.

exmh X windows mail reader based on MH, see below

fastmail quick batch mail (part of Elm)

from list senders of mails in your mailbox

frm [*foldername*] similar to **from** but has a better output. If foldername is present, it will list senders in folder foldername instead your incoming mailbox. This program is distributed as part of the elm package.

mail [*userid*] read mail. If userid is given in the command line, it will be used in compose mode. After done, mail will be sent to userid

mailtool OpenWindows mail program

mush mail user shell. Similar to

mail, but has a better user interface.

MH package

There are also other e-mail packages, such as MH, which come with their own commands. For example, MH has the following commands (and more):

inc

incorporate mail into inbox folder.

scan scan mailbox/folder

show show current selected e-mail.

8. Usenet news

knws interactive X window-based news reader

nn read news with **nn** (NoNews is good news.) Can be used to read through NNTP or spool.

ntidy cleanup or tidy your .newsrc

rn read news with **rn**.

trn threaded **rn** newsreader

xrn X window-based news reader

9. File transfer and remote access

bftp batch FTP

ftp [*hostname*] Using the **ftp** program to perform FTP to/from host hostname.

ftptool X-window (xview) based FTP program

kermit send or receive files with kermit protocol.

kermit-sfilename to send filename

ghostview or gv a front-end of ghostscript (**gs**).

gitrans converts GIF image to transparent GIF.

gimp image processing tool/drawing program with filters (png-ins) to manipulate image.

gnuplot a freeware plotting program capable of plotting 2D and 3D plots. It supports a wide variety of output formats.

gs Ghostscript, a PostScript previewer. It can also be used to convert PostScript into other graphic formats.

ps2epsfile.ps [file.eps] create Adobe's Encapsulated PostScript Interchange (EPSI) format from a postscript file.

psselect [infile [outfile]] select pages from a PostScript file.

pstoeidt converts PostScript to tgif format for editing

rplot plot 2-D data

tgif an X window drawing tool. It can produce various output formats, including PostScript.

xfig an X window drawing tool capable of producing fig output

xgraph a simple X window graphing program able to produce a bar graph.

mwm Motif window manager

olwm OpenLook virtual window manager

olwm OpenLook window manager

olmgr OpenWindows file manager

xcalc calculator

xclock display clock

xfm file managerX

xlock lock your screen

xman view/search manual pages

xterm a terminal or shell session

coreldraw start CorelDraw (commercial drawing program)

corelpaint start Corel Paint program (a commercial painting program)

kermitt -rfilename to receive filename

minicom communication package similar to Procomm

nftp hostname a user-friendly FTP program

rlogin hostname [-l userid] remote login to host hostname. If -l userid is given, will login as userid

rsh hostname remote shell to host hostname

ssh [-l login_name] hostname [command] connect to hostname with ssh (secure shell). If no command is given a shell will be started on host hostname. This is similar to telnet but the communication will be encrypted.

telnet hostname [portnum] connect to hostname with telnet. If portnum is specified, connect to port portnum. (Usually portnum is required if you want to connect to various services such as IRC or MUD.)

xftp X-window interface to FTP

xrsh hostname Open remote shell on host hostname in a new xterm window.

Window manager One of the following programs (window managers) is usually started when you login on a Unix workstation, the actual choice is controlled by your .xsession or .xinitrc file.

twm2 feeble window manager

netescape a WWW browser (X window) with a built in threaded newsreader

swais a text-based WAIS client

tkww Tk-based WWW browser

xv [files] image previewer and manipulation tools for X window. It supports various formats, including GIF, BMP, TIFF, and PostScript.

archie search the Archie database for anonymous FTP sites

arena X-window WWW-browser which understands HTML 3.0.

chimera X-window WWW-browser

gopher a Gopher client

hotjava WWW browser that understands Java language

hypermail converts mail into HTML

hytelnet access various libraries on the Internet

lynx a text-based WWW-browser

Mosaic NCSA X window WWW-browser

xloadimage filename image previewer

xpaint [filename] X window painting program, understands various image format including GIF

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13. Networking programs

finger userid@hostname

check information of userid at host hostname

host domainname

find information about domainname, such as its MX record or IP address

irc

Internet Relay Chat, a multi-user chat. Beware, addictive!

nslookup

query information about a specific host through a domain name server. For example you can find IP address of a machine, MX record of a domain.

ping hostname

check if host hostname is alive

runp [hostname]

show status of local machines. If hostname is given, only check that hostname

talk user@hostname

talk to user at host hostname

traceroute hostname

tracing IP packet from this host to hostname

write userd

write to userd's screen/session

14. Programming tools and shells

bash

Born again shell. A sh clone, but better

bison

a GNU implementation of yacc

cc

C compiler

CC

C++ compiler

cpp

C language preprocessor

cs

C-shell

dbx

a debugger program

dbxtool

X window interface to dbx

f77

FORTAN compiler

find [path...][expression]

search recursively through directory tree starting from path for files satisfying expression

15. Text processors, typsetters, and previewers

flex	GNU implementation of lex	nm	print name list of object file
g77	GNU Fortran compiler	perl	Practical Extraction and Reporting Language, a powerful programming and scripting language,
g++	GNU C++ compiler	prolog	a Prolog system
gawk	GNU awk	rcs	resource / version control
gcc	GNU C compiler	sccs	source code control system
gcl	GNU Common Lisp	sed	stream editor
gdb	GNU debugger	sh	Bourne shell
grep	pattern file(s) search for a string, pattern, or regular expres- sion in file(s)	tblsh	Tcl shell, a Tcl interpreter
imake	C preprocessor interface to the make command. Usually it uses file Imakefile .	tclsh	tclshell, a csh compatible shell but better
ksh	Korn shell	tgrind	reformat source code to make it pretty for print- out
lex	lexical analyzer generator	wish	a simple windowing shell, a tk/tcl implementa- tion
lint	verify a C program	yacc	parsing program generator. Generate C code from a grammar
m4	macro language processor	zsh	Z shell
make	maintain, update, compile, and regenerate re- lated files by a set of rules defined in file Make- file .		
soffice	StarOffice, a complete Office Suit compatible with Microsoft Office, read the manual pages first before you start to use it.		
psnup	manipulate PostScript file to have n pages on one side		
pstops	manipulate PostScript files to produce 2-up, 4- up, booklet, rotate and many other functions.		
nroff	process <i>filename</i> with nroff		
mp	format text, mail, news into a nice PostScript output.		
lout	a layout or typesetting program		
latex	process <i>filename.tex</i> with LaTeX and generate <i>filename.dvi</i> (a DVI file)		
ispell	interactive spelling program		
gxditview	display gtroff output files under X window.		
gtroff	GNU troff		
groff	GNU *roff		
a2ps	converts ASCII to PostScript		

16. *Spreadsheets*

oleo GNU spreadsheet
sc spreadsheet calculator
xspread X window version of **sc**

preview DVI file (*filename.dvi*)

xitem [*filename.tex*]
a X windows program to control the (La)TeX typesetting cycle, contains extensive helpfiles on LaTeX commands and syntax.

spell filename
spell the contents of filename

tex filename.tex
TeX document processing and typesetting.

troff filename
process filename with **troff**

xdvi filename.dvi