

Summary of UNIX commands

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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, freeware 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 programname).

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.

Most of the commands described in this reference card are explained in my UNIX and Internet book which is written in "Bahasa Indonesia" (Indonesian language.)

Rahardjo, Budi (1994), *Buku Pegangan Sistem Unix dan Internet* Bellingham, WA: OpenPathways, xiv+251pp. Comb-bound, ISBN 1-885130-11-2.

This book is available only by mail order. Send inquiry to Marina Schneider
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Conventions

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 no given, current directory will be used.

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1. Directory and file commands

bdf

display disk space (HP-UX). See also **df**.

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*

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 2.x

dtree

(visually) display directory structure

du [dirname]

display disk usage.

less *filename*

display *filename* one screenful. 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*.

xless

an X window pager (named after less)

2. Print-related commands

lp

print a file (HP-UX, Solaris 2.x)

lpq [-P*printername*]

query printer queue of the default printer. If *printername* is given, will query printer *printername*. (BSD, SunOS, Linux)

lpr [-P*printername*] *filename*

print *filename* (send *filename* to the default printer). If *printername* is given, will send to *filename* to *printername*. (BSD, SunOS, Linux)

lprm [-P*printername*] *jobnum*

remove printing job number *jobnum* from printer *printername*. (BSD, SunOS, Linux)

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

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

nice *programname*

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 (continuously) 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 unzip.

gzip *filename*

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

mt

magnetic tape control program.

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

unarj *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*.

MTOOLS

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"): **mcopy**, **mdel**, **mdir**, **mmd**, **mtype**, etc.

6. Text editors

asWedit

HTML editor

axe

a simple X window text editor

ee

easy edit: emacs with a help menu

elvis

a vi clone

emacs

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

jed

jed text editor

joe [*filename*]

a WordStar-like editor

nedit

a Motif-based text editor

pico

a simple text editor distributed as part of **pine**

sqhm

SoftQuad's HoTMetaL HTML editor.

textedit [*filename*]

OpenWindow's text editor

vi [*filename*]

vi editor

vile [*filename*]

a vi-clone

vim [*filename*]

a vi-clone

xcoral

a multiwindow X window text editor that can be used to browse C functions and C++ classes.

xedit

a simple X window text editor

xemacs
X window Emacs (formerly Lucid Emacs)

7. Mail Programs

biff
notify new mail has arrived

elm
read and/or compose e-mail.

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.

newmail

notify new mail has arrived (part of **elm** package)

pine
mail reader and composer.

xwafemail
X window interface of mail written in **wafe+perl**.

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.

emacs, for example has its own mail reader **M-x rmail** and also **M-x mh**, within emacs window.

8. Usenet news

knews
interactive X window-based news reader

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

nttidy
cleanup or tidy your .newsrsc

rn
read news with **rn**.

slrn
NNTP-based newsreader (can display color ANSI).

tin
newsreader

trn
threaded **rn** newsreader

xrn
X window-based news reader

xvnews
Xview-based newsreader

xwafenews
X window-based newsreader written in **wafe+perl**

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 -s filename
to send filename

kermit -r filename
to receive filename

minicom

communication package similar to Procomm

ncftp 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*

rz

receive (upload) files with zmodem

seyon

X window communication package

sz [-r] files

send (download) files with zmodem

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.)

xc

xcomm communication package

xftp

X-window interface to FTP

10. X window

openwin

start OpenWindows

startx

start X window

Window manager

The following programs (window managers) are usually started when you type **openwin** or **startx**. It is usually in your *.xinitrc* file.

fvwm

feeble window manager

mwm

Motif window manager

olvwm

OpenLook virtual window manager

olwm

OpenLook window manager

twm

tab window manager

X window programs

filemgr

OpenWindows file manager

oclock

display clock

xcalc

calculator

xclock

display clock

xfm

file manager

xlock

lock your screen

xodo

odometer, track the distance your mouse travel

xterm

a terminal or shell session

11. Graph, Plot, and Image Processing Tools

coreldraw

start CorelDraw (commercial drawing program)

corelpaint

start Corel Paint program (a commercial painting program)

ghostview

a front-end of ghostscript (**gs**).

giftrans

converts GIF image to transparant GIF.

gimp

image processing tool/drawing program with filters (plug-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.

pageview

preview PostScript file

ps2epsi *file.ps [file.epsi]*

create Adobe's Encapsulated PostScript Interchange (EPSI) format from a postscript file.

psselect *infile [outfile]*

select pages from a PostScript file.

pstoedit

converts PostScript to tgif format for editing

rplot

plot 2-D data

sxpm

show an XPM (X Pixmap) image.

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.

xloadimage *filename*

image previewer

xpaint *[filename]*

X window painting program, understands various image format including GIF

xv *[files]*

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

12. Information Systems

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

netscape

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

sgopher

a simple Gopher client, supports dumb terminal

swais

a text-based WAIS client

tkwww

Tk-based WWW browser

willow

a library, Z39.50 and WWW browser

xarchie

X-window interface of **archie**

xgopher

X-window gopher client

xmosaic

X-window WWW-browser

xwais

X-window WAIS client

13. Networking programs

finger *userid@hostname*

check information of <i>userid</i> at host <i>hostname</i>	write to <i>userid</i> screen/session	X window interface to dbx
host <i>domainname</i> find information about <i>domainname</i> , such as its MX record or IP address	zlocate <i>userid</i> use Zyper to locate <i>userid</i> (where or which machine the user logs on)	f77 FORTRAN compiler
irc Internet Relay Chat, a multi-user chat. Beware, addictive!	zwrite <i>userid</i> send a personal message to <i>userid</i> through zypher.	flex GNU implementation of lex
lpmudr an LP MUD client. Beware, addictive!	14. Programming tools and shells	g77 GNU Fortran compiler
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.	acc [<i>files</i>] Sun's ANSI C compiler	g++ GNU C++ compiler
ping <i>hostname</i> check if host <i>hostname</i> is alive	bash Born again shell. Ash clone, but better	gawk GNU awk
rup [<i>hostname</i>] show status of local machines. Of <i>hostname</i> is given, only check that <i>hostname</i>	bison a GNU implementation of yacc	gcc GNU C compiler
talk <i>useri@hostname</i> talk to <i>userid</i> at host <i>hostname</i>	byacc Berkeley yacc	gcl GNU Common Lisp
tf Tiny Fugue, a MUD client	cc C compiler	gdb GNU debugger
traceroute <i>hostname</i> tracing IP packet from this host to <i>hostname</i>	CC Sun's C++ compiler	gofer a Haskell implementation
write <i>userid</i>	cpp C language preprocessor	grep <i>pattern file(s)</i> search for a string, pattern, or regular expression in file(s)
	cs C-shell	imake C preprocessor interface to the make command. Usually it uses file Imakefile .
	dbx a debugger program	kcl Kyoto Common Lisp
	dbxtool	ksh Korn shell

lex	lexical analyzer generator	telsh	Tcl shell, a Tcl interpreter	GNU troff
lint	verify a C program	tcsh	tcshell, a csh compatible shell but better	gxditview display gtroff output files under X window.
m4	macro language processor	tgrind	reformat source code to make it pretty for printout	ispell filename interactive spelling program
make	maintain, update, compile, and regenerate related files by a set of rules defined in file Makefile .	wish	a simple windowing shell, a tk/tcl implementation	latex filename.tex process <i>filename.tex</i> with LaTeX and generate <i>filename.dvi</i> (a DVI file)
nm	print name list of object file	xcl	ANSI C compiler for AIX	lout a layout or typesetting program
pc	pascal compiler	yacc	parsing program generator. Generate C code from a grammar	mp format text, mail, news into a nice PostScript output.
perl	<i>Practical Extraction and Reporting Language</i> , a powerful programming and scripting language	zsh	Z shell	nroff filename process <i>filename</i> with nroff
prolog	a Prolog system	15. Text processors, typesetters, and previewers		
rcs	resource / version control	a2ps	converts ASCII to PostScript	psnup manipulate PostScript file to have <i>n</i> pages on one side
secs	source code control system	grodvi	convert troff to TeX DVI	pstops manipulate PostScript files to produce 2-up, 4-up, booklet, rotate and many other functions.
sed	stream editor	groff	GNU *roff	spell filename spell the contents of <i>filename</i>
sh	Bourne shell	grops	convert troff to PostScript	tex filename.tex TeX document processing and typesetting.
sml	New Jersey Standard ML	gtroff		troff filename process <i>filename</i> with troff

xdvi *filename.dvi*
preview DVI file (*filename.dvi*)

xtex *filename.dvi*
preview *filename.dvi*

16. Wordprocessors

ez
Andrew Toolkit wordprocessor
(free).

imaker
start an international version of
FrameMaker

maker
start FrameMaker

tps
start Interleaf

wp
start Word Perfect

17. Spreadsheets

oleo
GNU spreadsheet

sc
spreadsheet calculator

xspread
X window version of **sc**

18. Databases

isql
connect to Sybase server

jinx
a curses, perl-based database

sybperl
access Sybase server with **perl**
(script).

dbflst, dbfget, dbfadd, dbfdel, dbfpack, dbfcreat, dbfscan
DBF package to access DBF-format
file (usually generated by xbase
program), developed by Brad Eacker
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