A/UX® Reference Summary and Index

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APPLE COMPUTER, INC.

Apple Computer, Inc.
20525 Mariani Ave.
Cupertino, California 95014
(408) 996-1010

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A/UX Reference Summary and Index

Contents

Preface

Conventions Used in This Manual

A/UX® manuals follow certain conventions regarding presentation of information. Words or terms that require special emphasis appear in specific fonts within the text of the manual. The following sections explain the conventions used in this manual.

Significant fonts

Words that you see on the screen or that you must type exactly as shown appear in `Courier` font. For example, when you begin a work session on most UNIX systems, you see the following on the screen:

```
login:
```

The text shows `login:` in `Courier` typeface to indicate that it appears on the screen. If the next step in the manual is

Enter `start`

`start` appears in `Courier` to indicate that you must type in the word. Words that you must replace with a value appropriate to a particular set of circumstances appear in *italics*. Using the example just described, if the next step in the manual is

`login:` *username*

you type in your name—`Laura`, for example— so the screen shows:

```
login: Laura
```

Key presses

Certain keys are identified with names on the keyboard. These modifier and character keys perform functions, often in combination with other keys. In the manuals, the names of these keys appear in the format of an Initial Capital letter followed by SMALL CAPITAL letters.

The list that follows provides the most common keynames.

RETURN	DELETE	SHIFT	ESCAPE
OPTION	CAPS LOCK	CONTROL	

For example, if you enter

```
Applee
```

instead of

```
Apple
```

you would position the cursor to the right of the word and press the DELETE key once to erase the additional *e*.

For cases in which you use two or more keys together to perform a specific function, the keynames are shown connected with hyphens. For example, if you see

Press CONTROL-C

you must press CONTROL and C simultaneously (CONTROL-C normally cancels the execution of the current command).

Terminology

In A/UX manuals, a certain term can represent a specific set of actions. For example, the word *Enter* indicates that you type in an entry and press the RETURN key. If you were to see

Enter the following command: `whoami`

you would type `whoami` and press the RETURN key. The system would then respond by identifying your login name.

Here is a list of common terms and their corresponding actions.

Term	Action
Enter	Type in the entry and press the RETURN key
Press	Press a *single* letter or key *without* pressing the RETURN key
Type	Type in the letter or letters *without* pressing the RETURN key
Click	Press and then immediately release the mouse button

Term	Action
Select	Position the pointer on an item and click the mouse button
Drag	Position the pointer on an icon, press and hold down the mouse button while moving the mouse. Release the mouse button when you reach the desired position.
Choose	Activate a command title in the menu bar. While holding down the mouse button, drag the pointer to a command name in the menu and then release the mouse button. An example is to drag the File menu down until the command name Open appears highlighted and then release the mouse button.

Syntax notation

A/UX commands follow a specific order of entry. A typical A/UX command has this form:

`command` [*flag-option*] [*argument*] . . .

The elements of a command have the following meanings.

Element	Description
command	Is the command name.
flag-option	Is one or more optional arguments that modify the command. Most flag-options have the form [-opt...] where opt is a letter representing an option. Commands can take one or more options.
argument	Is a modification or specification of the command; usually a filename or symbols representing one or more filenames.

Element	Description
brackets ([ ])	Surround an optional item—that is, an item that you do not need to include for the command to execute.
ellipses (...)	Follow an argument that may be repeated any number of times.

For example, the command to list the contents of a directory (`ls`) is followed below by its possible flag options and the optional argument *names*.

```
ls [-R] [-a] [-d] [-C] [-x] [-m] [-l] [-L]
[-n] [-o] [-g] [-r] [-t] [-u] [-c] [-p] [-F]
[-b] [-q] [-i] [-s] [names]
```

You can enter

```
ls -a /users
```

to list all entries of the directory `/users`, where

`ls`	Represents the command name
`-a`	Indicates that *all* entries of the directory be listed
`/users`	Names which directory is to be listed

Command reference notation

Reference material is organized by section numbers. The standard A/UX cross-reference notation is

command(location)

where *command* is the name of the command, file, or other facility; *location* is the section within one of the reference manuals where the entry resides.

- ☐ Commands followed by section numbers (1M), (7), or (8) are located in *A/UX System Adminstrator's Reference.*
- ☐ Commands followed by section numbers (1), (1C), (1G), (1N), and (6) are located in *A/UX Command Reference.*

- ☐ Commands followed by section numbers (2), (3), (4), and (5) are located in *A/UX Programmer's Reference*.

For example,

`cat(1)`

refers to the command `cat`, which is described in Section 1 of *A/UX Command Reference*.

Introduction

to A/UX Reference Summary and Index

1. How to use this reference

A/UX Reference Summary and Index is an access aid designed to help you find information in the reference volumes for A/UX® Release 2.0 including

A/UX Command Reference
A/UX Programmer's Reference
A/UX System Administrator's Reference

The reference books cited above, upon which *A/UX Reference Summary and Index* is derived, are encyclopedic collections of manual pages, not narrative or tutorial works. They provide complete technical information about all the programs, utilities, and standard file formats included with your A/UX system. The introduction of each book gives a detailed description of its content and structure.

If you are still learning A/UX or are unfamiliar with a specific set of programs (such as the shells or the text-formatting programs), you should start by reading *Road Map to A/UX* and *A/UX Essentials*. After you have worked with A/UX, the reference books help you understand new features or refresh your memory about features you already know. This manual, *A/UX Reference Summary and Index*, further assists you by providing several ways to find exactly the information you want.

The *A/UX Reference Summary and Index* contains three sections:

- **Commands by Function.** This section lists the user commands in *A/UX Command Reference* and *A/UX System Administrator's Reference* according to primary-function categories.
- **Command Synopses.** This section is a condensation of syntax information from every manual page that describes a command.
- **Index.** This section is a comprehensive index for all materials in the A/UX references.

These sections are described in more detail following.

2. Contents of this manual

This manual contains three parts, separated by tab dividers.

2.1 Commands by function

With A/UX you are confronted with a multitude of commands. To help you sort them out, the first section of this book is a command summary. It groups commands together according to the functions that they perform. Each command is mentioned just once in the summary, in accordance with its general, or most important function. This way you get a bird's-eye view of the overall command capabilities of A/UX.

The Command Summary by Function section mentions all the user commands in *A/UX Command Reference* and *A/UX System Administrator's Reference*. The commands are categorized under headings such as "Logging in and Logging Out," "Formatting text into pages for printing," and so on.

To locate the commands for a function or task that interests you, first consult the list of major categories given at the start of the summary section. It lists the principal heads under which commands are grouped. When you find the appropriate major category, turn to the starting page indicated. There you will find mentions of A/UX commands for functions and tasks within your major category.

A mention of a command in this summary typically looks like:

change login password.....`passwd`(1)

For the change password function, you are directed to the `passwd` command. The brief function description ("change login password" in this example) applies to the command (`passwd`). Sometimes the brief description applies collectively to a group of related commands that are all described on the same manual page. When commands that are related this way appear on the same page, you will see the same description repeated several times.

A parenthesized section number follows the command name. The section number helps you locate the reference book where the associated manual page can be found. If no section number is provided, then the

command resides within a man page that collectively describes more than one command. The `whatis` command helps locate the overall name for a manual page that contains several related commands. The `whatis` command is described briefly in the "Online Help" section at the end of this introduction, and in the manual page by the same name in *A/UX Command Reference*.

The section number inside parentheses indicates where to look for more information about the command, as shown following.

(1) See *A/UX Command Reference*

(1M) See *A/UX System Administrator's Reference*

(2) See *A/UX Programmer's Reference*

(3) See *A/UX Programmer's Reference*

(4) See *A/UX Programmer's Reference*

(5) See *A/UX Programmer's Reference*

(7) See *A/UX System Administrator's Reference*

(8) See *A/UX System Administrator's Reference*

2.2 Command synopses

Most tasks require that you enter information on the command line after the name of the command, such as flag options that modify the behavior of the command. Often you must supply other arguments as well, such as the names of files. Each man page includes a syntax synposis that help you construct legal command lines.

The Command Synopses section gathers into one place all the synopsis sections from sections 1, 1M, 5, 6 and 8 of *A/UX Command Reference*, *A/UX Programmer's Reference*, and *A/UX System Administrator's Reference*. It helps you find the syntax of commands quickly and is helpful when the syntax is all you need to see. The synopses are presented in alphabetical sequence by command name. Left and right guide words at the top of each page indicate the first command and the last command covered on that page.

2.3 Index

The A/UX references contain a large amount of information, so finding a specific fact in them can be a daunting task. The Index section is designed to help you locate specific man pages by providing cross-references to them from a variety of topic headings.

Most manual pages are indexed under more than one topic heading; for example, `lorder`(1) is included under "archive files," "sorting," and "cross-references." This way you are more likely to find the reference you are looking for on the first try.

The Index sections works like an ordinary book index, except that each reference includes a short description of each manual page referenced. Between the index topic and the manual page description, you should be able to determine quickly whether any given reference contains the information you want. Once you have located the desired manual page, the parenthetical section number helps you find the correct book in which to look, as described previously. Online viewing of man pages is also an alternative as described in the section "Online help."

The key terms in this index were constructed by examining the meaning and usage of the A/UX manual pages. It is designed to be more discriminating and easier to use than the traditional permuted index, which mechanically lists keywords found in the manual page NAME sections.

2.4 Online help

The entire contents of *A/UX Command Reference*, *A/UX System Administrator's Reference*, and *A/UX Programmer's Reference* are available online. Three commands help you find information in them: `apropos`, `whatis`, and `man`.

The `man` command allows you to read a manual page on your screen. By pressing the spacebar you can view successive screens of text until you reach the end of a manual page.

To see a manual page displayed on your screen, enter the `man` command followed by the name of the entry you want to see. For example,

```
man passwd
```

displays the manual page for the `passwd` command.

The `whatis` command displays a short phrase that describes what a command does or what it is used for. This phrase is the same phrase that appears in the NAME section of the manual page for the specified command.

To see the description phrase from the NAME section of any manual page, enter the `whatis` command followed by the name of the entry you want to see. For example,

```
whatis ls
```

displays

```
ls(1)                - list contents of directory
```

The `apropos` command displays a list of manual pages and associated descriptions as long as they contain the string you supplied. This way you can search through all the A/UX command descriptions, helping you to locate manual pages related by the specified string. However, if the same string can be found as a topic in the Index section of this book, a more exhaustive list of cross-references can often be found there.

To see a list of all manual pages whose descriptions contain a given keyword or string, enter the `apropos` command followed by the word or string. For example,

```
apropos remove
```

locates the following manual pages:

```
colrm(1)          - remove columns from a file
deroff(1)         - remove nroff/troff, tbl, and eqn constructs
dev_kill(1M)      - remove special devices from directories
flock(2)          - apply or remove an advisory lock on an open file
ipcrm(1)          - remove interprocess communications facilities
lprm(1)           - remove jobs from the line printer spooling queue
remque insque(3N) - insert/remove element from a queue
rmdel(1)          - remove a delta from an SCCS file
rmdir rm(1)       - remove files or directories
rmdir(2)          - remove a directory file
unlink(2)         - remove directory entry
unmount(2)        - remove a file system
```

These online help commands are described more fully in the manual pages `man(1)`, `whatis(1)`, and `apropos(1)` in *A/UX Command Reference*.

Commands by Function

This section lists all A/UX user commands categorized by the types of functions you are likely to perform. The major functional categories appear in bold type. These major categories are found on the pages shown following:

Each category includes one or more subcategories, which are also flush against the left margin, but not in a bold typeface. Indented under each subcategory is a list of all the functions that fall within their scope.

To find a command that can count words in a file, you might follow this sequence of actions: (1) locate "Processing Unstructured or Structured Text" (page 18) as the most appropriate main category; (2) turn to page 18 and browse through pages until you locate "Report Occurrences of Words and Letters" as the next most appropriate subcategory; (3) locate the phrase "word count" as the function desired; and (4) locate the command `wc` across from the phrase "word count."

Once you have found a command likely to perform a desired function, you can get further information about that command by referring to the *A/UX Command Reference* and *A/UX System Administrator's Reference* (for commands

categorized as under "Administering Your System") An even faster way to locate information is to use the online help provisions of A/UX (see `whatis`(1) and `man`(1)).

Some commands shown are not described within the *A/UX Command Reference* or *A/UX System Administrator's Reference* within a manual page entry of the same name. An example is `rmdir`, which is described on the `rm`(1) manual page. You can use the `whatis` command to help you locate the correct reference manual page for more information about a given command. Another way to locate the correct manual page for commands like `rmdir` is to enter `rmdir` as the argument to the `man` command. The `man` command automatically locates the correct manual page and displays it.

The categories are listed in no special order. Generally, the order of subcategories is alphabetical. The order of command names and descriptions is generally alphabetical as well, based on the command name.

If you are already able to be productive by using the Macintosh applications you have learned but you are curious about the added value that A/UX itself might provide you, the following categories are likely to interest you.

Accessing the System and its Help Resources. This topic includes many subcategories of general interest, and commands that are likely to be used with medium frequency. Of these, the most frequently used commands are the commands used to obtain online help.

Managing Files and Directories. This topic includes the most frequently used commands in the system. When you have to manage large numbers of folders and files, the commands offered by A/UX are often preferable to performing any equivalent operations that might be available under the A/UX Finder. For example, command lines can be used to manipulate files in a nested folder, without a prior operation to open the nested folder.

Controlling how Commands are Run. Among the commands included are those that allow you to schedule commands to run in a recurring fashion (day or date driven), or in a time-delayed fashion.

Communicating. This topic includes commands that support the popular UNIX utility for electronic mail. To use the mail facilities of A/UX optimally, you could even create customized scripts that automatically start up according to specific dates and times (see "Writing Shell Programs" and "Controlling how Commands are Run").

Processing Unstructured or Structured Text. The editors are frequently used to edit database style tables, such as `/etc/passwd` as well as document text. `TextEditor` is the editor of choice if you possess mouse skills, or if you wish to learn programs that features the Macintosh user interface, such as its pull-down menus. The `grep` command is a frequently used A/UX utility that displays lines in any text file containing a string or substring you specify.

Processing Text Records. Within certain limits, the commands listed here can process information from files generated with Macintosh spreadsheet and database applications once they are saved as text. Another powerful provision, but one that is categorized differently from these, is `awk`. It is a high-level programming language used to write programs that process text or compile custom reports from field-structured text files.

Writing Shell Programs. The A/UX shell programming languages are frequently used, and often allow greatly increased productivity because of their high-level orientation. The shells allow users to easily create new A/UX functions, extending the repertoire of existing programs and often filling very specific needs for a given site. A number of the supplied A/UX programs are actually shell scripts, so they can readily be copied and customized.

Be forewarned that many commands could have been placed in more than one category. Also, some rarely-used commands are interspersed freely along with the frequently-used commands. Furthermore, categories may contain an incomplete list of references for a given topic. For example, the subcategory "Directing Data To and From Files" does not exhaustively describe input and output redirection because this topic is part of a much broader topic than is represented by the commands in this subcategory (`tee` and `cat`). Redirection is described along with a wide range of other shell functions in other A/UX books (see *A/UX User Interface*; and `sh`(1), `csh`(1), and `ksh`(1), in *A/UX Command Reference*). Rather than being lumped along with `tee`, the shell commands have been placed within the subtopic, "Choosing Session Preferences," and within a more encompassing main topic, "Controlling the User Interface."

As a final disclaimer, certain categories are necessarily nondescript, such as "Using Devices." Since you are using devices whenever you use A/UX, all commands could have been placed in this category. However, only those commands more concerned with manipulating devices than manipulating files or data were placed in this category. So the chief concern for the choice of category names was to find groups of titles that are clear when considered with their peers, rather than find category titles that by themselves delineated precise sets of commands.

Accessing the system and its help resources

Finding out about your network

show status of machines on local network (RPC version) ..... `rup`
show host status of local machines ..... `ruptime`
give login list for local machines (RPC version) ..... `rusers`
who's logged in on local machines? ..... `rwho`

Finding out about your system

user information lookup program ..... `finger`
show group memberships ..... `groups`
display user and group IDs and names ..... `id`
display login and logout times for each user of the system ..... `last`
display system page size ..... `pagesize`
display identification information about the current system .... `uname`
show how long system has been up ..... `uptime`
compact list of users who are on the system ..... `users`
who is on and what they are doing? ..... `w`

Finding out about your session

get login name ..... `logname`
display the value of variables set in the current environment ..... `printenv`
report process status ..... `ps`
print working directory name ..... `pwd`
get the terminal's name ..... `tty`

Getting online help

who is doing what ..... `whodo`
locate commands by keyword lookup ..... `apropos`
display the named manual page entries ..... `man`

display a brief description for the named manual page entry ..... whatis
locate source, binary, and online help file for a command ... whereis
display the directory path to a file by interpreting PATH and alias settings ..... which
who is on the system? ..... who
print effective current user ID ..... whoami

Logging in and logging out

sign on ..... login
login to a new group ..... newgrp
change login password ..... passwd
remote login ..... rlogin

Performing arithmetic calculations

arbitrary-precision arithmetic language ..... bc
desk calculator ..... dc
factor a number ..... factor
conversion program ..... units

Using time and date utilities

generate a calendar for the specified year ..... cal
reminder service ..... calendar
display and set the date ..... date
remind you when you have to leave ..... leave

Using devices

clear terminal screen ..... clear
eject diskette from drive ..... eject
Apple ImageWriter print filter iw2
magnetic tape manipulating program ..... mt
set the modes for a terminal ..... stty
set tabs on a terminal ..... tabs

Managing files and directories

Changing file attributes

change the permissions of a file ..... chmod
change the owner or group of a file ..... chown
change the owner or group of a file ..... chgrp
set the type and creator of a Macintosh resource file ..... settc
update access and modification times of a file ..... touch

Comparing files and directories

diff large files ..... bdiff
compare two files ..... cmp
differential file and directory comparator ..... diff
3-way differential file comparison diff3
directory comparison ..... dircmp
three-way file merge ..... merge
side-by-side difference program ..... sdiff
sum and count characters in the files in the given directories ..... sumdir
differential file and directory comparator ..... ucbdiff
3-way differential file comparison ucbdiff3

Compressing and encrypting files

compress and uncompress files ..... compact
compress and uncompress files ..... uncompact
compress and uncompress files ..... ccat
compress and expand data ..... compress
compress and expand data ..... uncompress
compress and expand data ..... zcat
encode/decode ..... crypt
compress and expand files ..... pack
compress and expand files ..... pcat

compress and expand files ..... unpack

Copying files and directories

copy files ..... cp
copy files to or from a cpio archive ..... cpio
context split ..... csplit
convert and copy a file ..... dd
convert a resource file to another format ..... fcnvt
make links ..... ln
copy files to or from an archive in an IEEE format ..... pax
remote file copy ..... rcp
split a file into pieces ..... split
copy files to or from a tar archive ..... tar
copy files to or from a tp archive ..... tp

Creating, renaming and removing files and directories

make a directory ..... mkdir
move or rename files ..... mv
remove files or directories ..... rm
remove files or directories ..... rmdir

Directing data to and from files

concatenate and display the contents of named files ..... cat
pipe fitting ..... tee

Displaying filenames and file status

determine file type ..... file
list contents of directory ..... ls
calculate a checksum ..... sum
reports version number of files ..... version

Finding files

find files ..... `find`

Finding out about your file system

report number of free disk blocks ..... `df`

summarize disk usage ..... `du`

Looking at files

give first few lines ..... `head`

show the contents of a file in display-size chunks ..... `more`

show the contents of a file in display-size chunks ..... `page`

show the contents of a file in display-size chunks ..... `pg`

deliver the last part of a file ..... `tail`

Printing files

send or cancel requests to a line printer for a Berkeley file system (4.2) ..... `lp`

send or cancel requests to a line printer for a Berkeley file system (4.2) ..... `cancel`

spool queue examination program ..... `lpq`

off line print ..... `lpr`

remove jobs from the line printer spooling queue for a Berkeley file system (4.2) ..... `lprm`

Controlling the user interface

Choosing session preferences

present a Macintosh® login dialog box when called by `init` ..... `Login`

A/UX® Toolbox application for managing command-interpretation windows and moderating access to the A/UX console window ..... `CommandShell`

change default login shell ..... `chsh`

Customizing the Macintosh system for one user account

create a personal System Folder ..... `systemfolder`

Interpreting command lines

run the C shell, a command interpreter with C-like syntax ..... `csh`

run the Korn shell, a command interpreter compatible with Bourne shell ..... `ksh`

run the Bourne shell, the earliest of the command interpreters available ..... `sh`

run the Bourne shell, the earliest of the command interpreters available ..... `rsh`

shell layer manager ..... `shl`

discontinue command interpretation in current shell ..... `exit`

discontinue csh command interpretation session ..... `logout`

Launching Macintosh applications

execute a Macintosh binary application ..... `launch`

Controlling how commands are run

Delaying a command or part of a shell script

suspend execution for an interval ..... `sleep`

Establishing the environment for a Macintosh application

change the fields of the SIZE resource of a file ..... `changesize`

convert from Macintosh® encoding to International Standards Organization (ISO) encoding ..... `mactoiso`

convert from Macintosh® encoding to International Standards Organization (ISO) encoding ..... `isotomac`

Establishing the execution environment for a command

change root directory for a command ..... `chroot`

set environment for command execution ..... `env`

run a command at low priority ..... `nice`

run a command immune to hangups ..... `nohup`

remote shell ..... `remsh`

generate `y` entries in response to requests for input ..... `yes`

change current working directory of the shell ..... `cd`

evaluate arguments as a command line ..... `eval`

evaluate arguments as a command line while exiting shell ..... `exec`

evaluate arguments as a command line any number of times ..... `repeat`

display or reset default file permissions ..... `umask`

display or set the maximum file size ..... `ulimit`

Interpreting command lines while maintaining an audit trail

start a shell that records terminal input and output ..... `script`

Setting a time at which to run a command

clock daemon ..... `cron`

execute commands at a later time ..... `at`

execute commands at a later time ..... `batch`

user `crontab` utility ..... `crontab`

Managing processes while they run

Signaling and terminating processes

Time the duration of a process

Generating command lines

Construct and execute command lines

Construct command lines using Macintosh dialog boxes

Communicating

Communicating with other users

write to all users ..... `wall`
be notified if mail arrives and who it is from ..... `biff`
who is my mail from? ..... `from`
send mail to users or read mail ..... `mail`
send mail to users or read mail ..... `rmail`
interactive message processing system ..... `mailx`
permit or deny messages ..... `mesg`
display local news items ..... `news`
talk to another user ..... `talk`
write to another user ..... `write`

Using AppleTalk

choose a default printer on the AppleTalk® internet .... `at_cho_prn`
look up network visible entities (NVEs) registered on the AppleTalk internet ..... `atlookup`
copy data to a remote PAP server ..... `atprint`
display status from a PAP server ..... `atstatus`

Using TC/IP

write to all users over a network ..... `rwall`
attach a dialup serial line as a network interface ..... `slip`
DARPA Trivial File Transfer Protocol server ..... `tftpd`
ARPANET file transfer program ..... `ftp`
remote file distribution program ..... `rdist`
remote sign on ..... `remlogin`
user interface to the TELNET protocol ..... `telnet`
trivial file transfer program ..... `tftp`

Using UUCP

Using other communications tools

Playing Games

alien invaders attack the earth ..... aliens
provide drill in number facts ..... arithmetic
escape from the automatic robots ..... autorobots
the game of backgammon ..... back
simulate a punched card corresponding to a text argument ..... bcd
the game of black jack ..... bj
try to escape the killer robots ..... chase
the game of craps ..... craps
the card game cribbage ..... cribbage
play "Go Fish" ..... fish
print a random, hopefully interesting, adage ..... fortune
guess the word ..... hangman
play the game of life ..... life
play the game of Mastermind ..... mastermind
generate a maze ..... maze
guessing game ..... moo
convert Arabic numerals to English ..... number
test your knowledge ..... quiz
animated raindrops display ..... rain
escape from the robots ..... robots
trekkie game ..... trek
tic-tac-toe ..... ttt
tic-tac-toe ..... cubic
twinkle stars on the screen ..... twinkle
play the growing worm game ..... worm
animate worms on a display terminal ..... worms
the game of hunt-the-wumpus ..... wump

Processing text as records within a database

Processing sorted text records

Processing text records and fields

Processing unstructured or structured text

Editing text

mouse-based text editor ..... `TextEditor`
big file scanner ..... `bfs`
text editor ..... `ed`
text editor ..... `red`
text editor ..... `ex`
text editor ..... `e`
text editor ..... `edit`
screen-oriented (visual) display editor ..... `vi`
screen-oriented (visual) display editor ..... `view`
screen-oriented (visual) display editor ..... `vedit`

Generating custom text transformations

pattern scanning and processing language ..... `awk`
macro processor ..... `m4`
generate encryption key ..... `makekey`
stream editor ..... `sed`
translate characters ..... `tr`

Printing poster-size text

generate a poster ..... `banner`
generate a large banner ..... `banner7`

Processing tabbed text

expand tabs to spaces, and vice versa ..... `expand`
expand tabs to spaces, and vice versa ..... `unexpand`
change the format of a text file ..... `newform`

Report occurrences of words or letters

Processing text to produce printed documents

Filtering out printer motions from text for display purposes

Formatting text into pages for printing

Preparing text with troff markup

create or extend bibliographic database ..... addbib
locate wordy sentences in a document ..... diction
locate wordy sentences in a document ..... explain
build inverted index for a bibliography ..... indxbib
create a subject-page index for a document ..... ndx
make permuted index ..... ptx
find and insert literature references in documents..... refer
sort bibliographic database..... sortbib
find spelling errors ..... spell
find spelling errors..... hashmake
find spelling errors ..... spellin
find spelling errors ..... hashcheck
analyze surface characteristics of a document..... style
generate a list of subjects from a document..... subj

Preprocess subsidiary markup within troff markup

prepare constant-width text for otroff ..... cw
prepare constant-width text for otroff ..... checkcw
format mathematical text for troff ..... eqn
format mathematical text for troff ..... checkeq
simple text formatter ..... fmt
fold long lines for finite-width output device ..... fold
pic preprocessor for drawing graphs..... grap
format mathematical text for nroff..... neqn
line numbering filter..... nl
troff preprocessor for drawing pictures ..... pic
eliminate .so's from nroff input..... soelim
make output single spaced..... ssp
format tables for nroff or troff ..... tbl

Process troff markup for special purposes

check documents formatted with the mm macros ..... checkmm
check documents formatted with the mm macros checkmm1
check nroff/troff files ..... checknr
remove nroff/troff, tbl, and eqn constructs ..... deroff
mark differences between files ..... diffmk
find hyphenated words ..... hyphen
produce cross-reference listing of macro files ..... macref

Setting up device-specific fonts for use with troff

prepare troff description files ..... iwprep
prepare troff description files ..... makedev

Processing plotter drawings

Filter plotter input for display purposes

interpret plotter instructions for use at a vintage display device ..... `tplot`

Processing graphics

draw a graph ..... `graph`

interpolate smooth curve ..... `spline`

Writing shell programs

Evaluate or provide true or false results

condition evaluation command ..... `test`
provide truth values ..... `true`
provide truth values ..... `false`

Evaluating expressions

isolate substrings within a pathname argument ..... `basename`
isolate substrings within a pathname argument ..... `dirname`
echo arguments ..... `echo`
evaluate arguments as an expression ..... `expr`
parse command options ..... `getopt`
reverse characters within each line of text ..... `rev`
Korn shell instruction to echo arguments ..... `print`

Perform input or output operatations

post a Macintosh® alert box to query the user ..... `macquery`
read one line ..... `line`
query the user for input ..... `query`
query `terminfo` database ..... `tput`

Programming

Using Macintosh development tools

decompile a resource file ..... `derez`
compile resources ..... `rez`

Using other programming tools

debugger ..... `adb`
archive and library maintainer for portable archives ..... `ar`
common assembler ..... `as`
a compiler/interpreter for modest-sized programs ..... `bs`
swap bytes in COFF files ..... `conv`
disassembler ..... `dis`
dump selected parts of an object file ..... `dump`
convert an object file to Motorola S-record format ..... `hex`
link editor for common object files ..... `ld`
generate programs for simple lexical tasks ..... `lex`
find ordering relation for an object library ..... `lorder`
maintain, update, and regenerate groups of files ..... `make`
create shared library ..... `mkshlib`
display the symbol table of a common object file ..... `nm`
convert binary data to a displayable form in octal, decimal, hexadecimal, or ASCII ..... `od`
display profile data ..... `prof`
receive and convert Motorola S-records from a port to a file ..... `rcvhex`
regular expression compile ..... `regcmp`
symbolic debugger ..... `sdb`
display section sizes of common object files ..... `size`
find the printable strings in an object or other binary file .... `strings`

Using the C language

Using the Fortran language

Using version management (RCS)

Using version management (SCCS)

Other programming languages

Administering your system

AppleTalk network maintenance

configure and view AppleTalk® network interfaces ..... `appletalk`
look up the application loaded onto an intelligent peripheral ..... `fwd_lkup`
load an application onto an intelligent peripheral ..... `fwdload`

TC/IP network maintenance

address resolution display and control ..... `arp`
display the current state of `slip` lines on a `slip` server ..... `dslipuser`
get an Ethernet address ..... `etheraddr`
Internet File Transfer Protocol server ..... `ftpd`
configure network interface parameters ..... `ifconfig`
Internet services daemon ..... `inetd`
initialize the `slip` user database ..... `mkslipuser`
Internet domain name server ..... `named`
exercise the network by sending test packets to a named host .... `ping`
DARPA port to RPC program number mapper ..... `portmap`
remote shell server ..... `remshd`
remote execution server ..... `rexecd`
remote login server ..... `rlogind`
manually manipulate the routing tables ..... `route`
network routing daemon ..... `routed`
kernel statistics server ..... `rstatd`
`rusers` server ..... `rusersd`
network `rwall` server ..... `rwalld`
system status server ..... `rwhod`
attach serial lines as network interfaces ..... `slattach`
attach and configure serial lines as network interfaces ... `slattconf`
convert Internet addresses to standard form ..... `stdhosts`
remote user communication server ..... `talkd`

DARPA TELNET protocol server ..... telnetd
transliterate protocol trace ..... trpt
show network status ..... netstat
query name servers interactively ..... nslookup

Backing up your system

interactive block copy ..... bcopy
copy file systems for optimal access time ..... dcopy
copy the files within the named file system to a dump.bsd archive ..... dump.bsd
copy the files within the named file system to a dump.bsd archive ..... rdump
autorecovery administration ..... escher
update autorecovery files ..... eu
update important files for autorecovery purposes ..... eupdate
fast incremental backup ..... finc
recover files from a backup tape ..... frec
copy files from a dump.bsd archive into an existing file system ..... restore
copy file systems with label checking ..... volcopy
copy file systems with label checking ..... labelit

Examining system status

extract error records from a crash dump ..... errdead
error-logging daemon ..... errdemon
process a report of logged errors ..... errpt
terminate the error-logging daemon ..... errstop
turn on/off the reporting of extended errors ..... exterr
display kernel name cache statistics ..... ncstats
print system facts ..... pstat

File system maintenance

clear inode ..... clri
device name ..... devnm
list file names and statistics for a file system ..... ff
check file-system consistency and interactively repair ..... fsck
debug the file system ..... fsdb
create a file-system-table entry ..... fsentry
install random inode generation numbers ..... fsirand
report file-system state ..... fsstat
identify processes using a file or file structure ..... fuser
construct an SVFS file system ..... mkfs
construct a file system with 512-byte blocks mkfs1b
make a `lost+found` directory for `fsck` ..... mklost+found
mount and dismount file systems ..... mount
mount and dismount file systems ..... umount
locate the filename associated with an i-node ..... ncheck
construct a new UFS file system ..... newfs
tune an unmounted Berkeley 4.2 file system (UFS) ..... tunefs
report file-system type ..... fstyp
update the superblock ..... sync

Installing new software

install files in specified directories ..... cpset
install A/UX commercial software from floppy disks ..... finstall
install files in specified directories ..... install

Kernel generation

build a new up-to-date kernel ..... autoconfig
tune kernel parameters for work-load optimization ..... kconfig
identify configuration information stored within the named kernel file ..... module_dump
prepare and configure a new kernel ..... newconfig
prepare for new kernel configuration ..... newunix

Mail system maintenance

server for `biff(1)` ..... `comsat`
list the contents of the mail queue ..... `mailq`
rebuild the database for the `mail` aliases file ..... `newaliases`
send mail over the Internet ..... `sendmail`

Monitoring system activity

overview of accounting commands ..... `acct`
overview of accounting commands..... `acctdisk`
overview of accounting commands..... `acctdusg`
overview of accounting commands ..... `accton`
overview of accounting commands..... `acctwtmp`
command summary from per-process accounting records ... `acctcms`
search and format process accounting files..... `acctcom`
connect-time accounting..... `acctcon`
connect-time accounting ..... `acctcon1`
connect-time accounting ..... `acctcon2`
merge or add total accounting files..... `acctmerg`
process accounting ..... `acctprc`
process accounting..... `acctprc1`
process accounting..... `acctprc2`
shell procedures for accounting..... `acctsh`
shell procedures for accounting ..... `chargefee`
shell procedures for accounting ..... `ckpacct`
shell procedures for accounting..... `dodisk`
shell procedures for accounting ..... `lastlogin`
shell procedures for accounting ..... `monacct`
shell procedures for accounting ..... `nulladm`
shell procedures for accounting..... `prctmp`
shell procedures for accounting ..... `prdaily`
shell procedures for accounting ..... `prtacct`
shell procedures for accounting..... `shutacct`

shell procedures for accounting ..... `startup`
shell procedures for accounting ..... `turnacct`
generate disk accounting data by user ID ..... `diskusg`
manipulate connect accounting records ..... `fwtmp`
manipulate connect accounting records ..... `wtmpfix`
gathers printer/plotter accounting information..... `pac`
run daily accounting..... `runacct`
system activity report package ..... `sadc`
system activity report package ..... `sal`
system activity report package ..... `sa2`
report interprocess communication facilities status..... `ipcs`
display load average statistics..... `lav`
system activity graph..... `sag`
system activity reporter ..... `sar`
display system status on status line of a terminal..... `sysline`

Network File System (NFS) network maintenance

process network lock daemon..... `lockd`
NFS mount request server..... `mountd`
NFS daemons ..... `nfsd`
NFS daemons ..... `biod`
Network File System statistics ..... `nfsstat`
report RPC information..... `rpcinfo`
show all remote mounts..... `showmount`
spray packets ..... `spray`
`spray` server ..... `sprayd`
provide crash and recovery for network locking services..... `statd`
set or display name of current domain system ..... `domainname`

Print spooler maintenance

allow `lp` requests ..... `accept`
configure the `lp` spooling system ..... `lpadmin`
line-printer control program ..... `lpc`
4.2 line-printer daemon ..... `lpd`
start or stop the LP request scheduler and move requests .... `lpsched`
start or stop the LP request scheduler and move requests ..... `lpshut`
start or stop the LP request scheduler and move requests ..... `lpmove`
generate line-printer ripple pattern ..... `lptest`
prevent LP requests..... `reject`
TRANSCRIPT spooler filters for POSTSCRIPT printers .... `transcript`
TRANSCRIPT spooler filters for POSTSCRIPT printers..... `psbanner`
TRANSCRIPT spooler filters for POSTSCRIPT printers..... `pscomm`
TRANSCRIPT spooler filters for POSTSCRIPT printers..... `psinterface`
TRANSCRIPT spooler filters for POSTSCRIPT printers ..... `psrv`
TRANSCRIPT spooler filters for POSTSCRIPT printers..... `pstext`
enable or disable LP printers ..... `enable`
enable or disable LP printers ..... `disable`
print LP status information ..... `lpstat`

Setting up the system

set or update bad block information ..... `badblk`
change current A/UX system nodename..... `chgnod`
format a disk through a driver-dependent format operation ..... `diskformat`
perform disk partitioning ..... `dp`
set terminal type, modes, speed, and line discipline..... `getty`
set terminal type, modes, speed, and line discipline ..... `apm_getty`
set console keyboard mapping..... `keyset`
push streams line disciplines ..... `line_sane`
associate named partitions with device files..... `pname`
set a serial port..... `setport`
set the local time zone ..... `settimezone`

add or delete disk blocks to or from the swap area ..... swap
terminfo compiler ..... tic
modify the /etc/inittab file ..... tty_add
modify the /etc/inittab file ..... tty_kill
time zone dumper ..... tzdump
time zone compiler ..... tzic
check installation of boards ..... checkinstall
set or display the identifier of the current host system ..... hostid
set or display the name of the current host system ..... hostname
set or reset the terminal to a sensible state ..... tset
set or reset the terminal to a sensible state..... reset

Starting up and shutting down

display a progress bar during the A/UX® boot sequence ..... StartMonitor
system initialization shell scripts ..... brc
system initialization shell scripts ..... bcheckrc
system initialization shell scripts ..... macsysinitrc
system initialization shell scripts ..... rc
system initialization shell scripts ..... sysinitrc
system initialization shell scripts ..... powerfail
process control initialization ..... init
process control initialization ..... telinit
kill all active processes ..... killall
power down the system ..... powerdown
reboot the operating system ..... reboot
close down the system at a given time ..... shutdown
send messages to StartMonitor during the A/UX® boot process ..... startmsg
run startup programs at boot time..... startup

System administration tools

remove devices files within a directory ..... dev_kill
build device file..... mknod
substitute user ID ..... su

User account maintenance

add a user account ..... adduser
remote user information server ..... fingerd
password/group file checkers..... pwck
password/group file checkers ..... grpck
edit the password file ..... vipw
change finger entry ..... chfn

Uucp network maintenance

transfer files queued by uucp or uux..... uucico
transfer files queued by uucp or uux ..... uushell
clean up the uucp spool directory ..... uuclean
monitor UUCP network ..... uusub
UUCP execution file interpreter..... uuxqt

Yellow Pages maintenance

make a yellow pages dbm file..... makedbm
reverse the netgroup file ..... revnetgroup
build and install yellow pages database..... ypinit
rebuild yellow pages database ..... ypmake
server for modifying yellow pages password file ..... yppasswdd
what version of a YP map is at a YP server host ..... yppoll
force propagation of a changed YP map..... yppush
yellow pages server and binder processes ..... ypserv
yellow pages server and binder processes ..... ypbind
point ypbind at a particular server ..... ypset
transfer a YP map from some YP server to here ..... ypxfr
list the contents of the named YP map ..... ypcat

list the value of keys in a YP map ..... `ypmatch`
change login password in yellow pages..... `yppasswd`
which host is the YP server or map master? ..... `ypwhich`

Command Synopses

300

300 [+12] [-*n*] [-d*t*, *l*, *c*]
300s [+12] [-*n*] [-d*t*, *l*, *c*]

300s

See 300.

4014

4014 [-c*n*] [-n] [-p*l*] [-t] [*file*]

450

450

accept

/usr/lib/accept *destinations*

acct

/usr/lib/acct/acctdisk
/usr/lib/acct/acctdusg [-p *file*] [-u *file*]
/usr/lib/acct/accton [*file*]
/usr/lib/acct/acctwtmp *reason*

acctcms

/usr/lib/acct/acctcms [-a [-o] [-p]] [-c] [-j] [-n] [-s] [-t] *file*...

acctcom

acctcom [-a] [-b] [-C *sec*] [-e *time*] [-E *time*] [-f] [-g *group*] [-h] [-H *factor*] [-i] [-I *chars*] [-k] [-l *line*] [-m] [-n *pattern*] [-o *ofile*] [-O *sec*] [-q] [-r] [-s *time*] [-S *time*] [-t] [-u *user*] [-v] [*file*] ...

acctcon

/usr/lib/acct/acctcon1 [-l*file*] [-o*file*] [-p] [-t]
/usr/lib/acct/acctcon2

acctcon1

See acctcon.

acctcon2

See acctcon.

acctdisk

See acct.

acctdusg

See acct.

acctmerg

/usr/lib/acct/acctmerg [-a] [-i] [-p] [-t] [-u] [-v] [*file...*]

accton

See acct.

acctprc

/usr/lib/acct/acctprc1 [*ctmp*]
/usr/lib/acct/acctprc2

acctprc1

See acctprc.

acctprc2

See acctprc.

acctsh

/usr/lib/acct/chargefee *login-name number*
/usr/lib/acct/ckpacct [*blocks*]
/usr/lib/acct/dodisk [-o] [*file ...*]
/usr/lib/acct/lastlogin
/usr/lib/acct/monacct *number*
/usr/lib/acct/nulladm *file*
/usr/lib/acct/prctmp [*file...*]
/usr/lib/acct/prdaily [-l] [-c] [*mmdd*]
/usr/lib/acct/prtacct *file* [*heading*]
/usr/lib/acct/shutacct [*reason*]
/usr/lib/acct/startup
/usr/lib/acct/turnacct on | off | switch

acctwtmp

See acct.

adb

adb [-k] [-w] [*objfil* [*corfil*]]

addbib

addbib [-p *promptfile*] [-a] *database*

adduser

adduser [-r *real-name*] [-a *address*] [-x *extension*] [-p *home-phone*] [-g *group*] [-s *shell*] [-d *dir*] [-h *home*] [-u *lowest*] [-U *uid*] [-i] [-c] [*login-name*]...

admin

admin [-a*login*] [-d*flag*[*flag-val*]] [-e*login*] [-f*flag*[*flag-val*]] [-h] [-i[*name*]] [-m[*mrlist*]] [-n] [-r*rel*[.*lev*]] [-t[*name*]] [-y[*comment*]] [-z] *file*...

ae

aliens

/usr/games/aliens

apm_getty

See getty.

appletalk

appletalk [-u] [-i *interface*] [-b *hardware_interface*] [-z] [-d] [-n] [-s]

apply

apply [-a*c*] [-*n*] *command args*...

apropos

apropos *keyword*...

ar

ar *key* [clsuv] [abi *posname*] *afile name* ...

arithmetic

/usr/games/arithmetic [+-x/] [*range*]

arp

/etc/arp *hostname*
/etc/arp -a [unix] [kmem]
/etc/arp -d *hostname*
/etc/arp -s *hostname ether-addr* [temp] [pub]
/etc/arp -f *filename*

arp

as

as [–m] [–n] [–o *objfile*] [–R] [–V] *filename*

asa

asa [*file...*]

ascii

cat /usr/pub/ascii

at

at *time* [*date*] [*+increment*]
at -l [*job...*]
at -r *job...*
batch

atlookup

atlookup [-d] [-r *nn*] [-s *nn*] [-x] [*object*[:*type*[@*zone*]]]
atlookup -z [-C]

atprint

atprint [*object*[:*type*[@*zone*]]]

atstatus

atstatus [*object*[:*type*[@*zone*]]]

at_cho_prn

at_cho_prn [*type*[@*zone*]]

autoconfig

/etc/autoconfig [-V] [-v] [-I] [-a] [-k] [-D] [-i *file*]
[-o *file*] [-m *directory*] [-b *directory*] [-l *linker*] [-S *file*]
[-s *directory*] [-d *directory*] [-L *loadfile*] [-M *file*]
[-t *timeout*]

autorobots

/usr/games/autorobots

awk

awk [-f *file...*] [-Fc] [*prog*] [*parameters*] [*file...*]

back

/usr/games/back

badblk

badblk [-r] /dev/rdsk/c?d?s? [*blkno...*]

banner

banner *string ...*

banner7

banner7 [-w[*n*]] [*message...*]

basename

basename *string* [*suffix*]
dirname *string*

batch

See at.

bc

bc [-c] [-l] [*file...*]

bcd

/usr/games/bcd *text*

bcheckrc

See brc.

bcopy

/etc/bcopy

bdiff

bdiff *file1 file2* [*n*] [-s]

bfs

bfs [-] *filename*

biff

biff [*choice*]

biod

See nfsd.

bj

/usr/games/bj

boot

brc

/etc/brc
/etc/bcheckrc
/etc/macsysinitrc
/etc/powerfail
/etc/rc
/etc/sysinitrc

bs

bs [*file* [*args*]]

cal

cal [[*month*] *year*]

calendar

calendar [–]

cancel

See lp.

cat

cat [–u] [–s] [–v [–t] [–e]] *files*

cb

cb [-s] [-j] [-l *leng*] [*file...*]

cc

cc [-B *string*] [-c] [-C] [-D *symbol*[=*def*]] [-E] [-F]
[-fm68881] [-g] [-I *dir*] [-L *dir*] [-l*x*] [-n] [-o *outfile*]
[-O] [-p] [-P] [-R] [-s] [-S] [-t [p012al]] [-T]
[-U *symbol*] [-v] [-W *c*,*arg1*[,*arg2...*]] [-X] [-Z *flags*]
[-#] ... *file* ...

ccat
See compact.

cdc
cdc [-m[*mrlist*]] -r *SID* [-y[*comment*]] *file* ...

cflow
cflow [-d*num*] [-i_] [-ix] [-r] *file* ...

changesize
/mac/bin/changesize [-v] [-p*prefsize*] [-m*minsize*] [±*option*] *file*

chargefee
See acctsh.

chase
/usr/games/chase [*nrobots*] [*nfences*]

checkcw
See cw.

checkeq
See eqn.

checkinstall
/etc/checkinstall ethertalk

checkmm
checkmm *file* ...

checkmm1
See checkmm.

checknr
checknr [-a.*x1*.*y1*.*x2*.*y2*.....*xn*.*yn*] [-c.*x1*.*x2*.*x3*.....*xn*] [-f] [-s] [*file*...]

chfn
chfn [*loginname*]

chgnod
chgnod *new-name* [*kernel-file*]

chgrp
See chown.

chmod
chmod *mode file ...*

chown
chown *owner file ...*
chgrp *group file ...*

chroot
/etc/chroot *newroot command*

chsh
chsh *name* [*shell*]

ci
ci [-r[*rev*]] [-f[*rev*]] [-k[*rev*]] [-l[*rev*]] [-u[*rev*]] [-q[*rev*]] [-m*msg*] [-n*name*] [-N*name*] [-s*state*] [-t[*txtfile*]] *files*

ckpacct
See acctsh.

clear
clear

clri
/etc/clri [-T*file-system-type*] *file-system i-number ...*

cmdo
cmdo [*command-name*]

cmp
cmp [-l] [-s] *file1 file2*

co
co [-l[*rev*]] [-p[*rev*]] [-q[*rev*]] [-d*date*] [-r[*rev*]] [-s*state*] [-w[*login*]] [-j*joinlist*] *files*

col
col [-b] [-f] [-p] [-x]

colcrt

colcrt [-] [-2] [*file*]

colrm

colrm *startcol* [*endcol*]

comb

comb [-c*list*] [-o] [-p*sid*] [-s] *file* ...

comm

comm [-[123]] *file1 file2*

CommandShell

CommandShell [-b *pid*] [-u] [-q]

compact

compact [*name...*]
uncompact [*name...*]
ccat [*file...*]

compress

compress [-f] [-v] [-c] [-V] [-b *maxbits*] [*files*]
uncompress [-f] [-v] [-c] [-V] [*files*]
zcat [-V] [*files*]

comsat

/usr/etc/in.comsat

conv

conv [-] [-a] [-o] [-p] [-s] -t *target file* ...

cp

cp [-i] [-r] *file1 file2*
cp [-i] [-r] *file... directory*

cpio

cpio -o[acBFv]
cpio -i[Bcdmrtuvfs Sb6] [*patterns*]
cpio -p[adlmuv] *directory*

cpp

/lib/cpp [-C] [-D*name*[=*def*]] [-I*dir*] [-P] [-U*name*] [-M[*prefix*]] [-Y] [*ifile* [*ofile*]]

cpset

cpset [–o] *object directory* [*mode* [*owner* [*group*]]]

craps

/usr/games/craps

cribbage

/usr/games/cribbage [–r] [–e] [–q] *name...*

cron

/etc/cron

crontab

crontab [*file*]
crontab -l
crontab -r

crypt

crypt [*password*]

csh

csh [-c] [-e] [-f] [-i] [-n] [-s] [-t] [-v] [-V] [-x] [-X] [*arg...*]

csplit

csplit [-f *prefix*] [-k] [-s] *file arg1* [*...argn*]

ct

ct [-h] [-v] [-w*n*] [-s*speed*] *telno ...*

ctags

ctags [-a] [-u] [-w] [-x] *name ...*

ctrace

ctrace [-b] [-e] [-f*functions*] [-l*n*] [-o] [-p *'s'*] [-P] [-r*f*] [-s] [-t*n*] [-u] [-v*functions*] [-x] [*file*]

cu

cu [-d] [-e] [-h] [-l*line*] [-m] [-n] [-o] [-s*speed*] [-t] *args*

cubic

See ttt.

cut

cut *-type* [-d *char*] [-s] [*file*]...

cw

cw [-d] [-f*n*] [-l*xx*] [-r*xx*] [-t] [+t] [*files...*]
checkcw [-l*xx*] [-r*xx*] *file...*

cxref

cxref [-c] [-o *file*] [-s] [-t] [-w[*num*]] *file...*

daiw

daiw [-v] [-r*num*] *file*

daps

daps [-b] [-h*string*] [-o*list*] [-r] [-s*n*] [-t] [-w] [*file...*]

date

date [*mmddhhmm*[*yy*]] [+*format*]

dc

dc [*file*]

dcopy

/etc/dcopy [-s*X*] [-a*n*] [-d] [-v] [-f*fsize* [:*isize*]] *inputfs outputfs*

dd

dd [*option=value*]...

delta

delta [-g*list*] [-m[*mrlist*]] [-n] [-p] [-r*SID*] [-s] [-y[*comment*]] *file* ...

derez

derez [*option*]... *resource-file* [*resource-description-file*]...

deroff

deroff [-m*x*] [-w] [*file...*]

devnm

/etc/devnm [*mount-point*]

dev_kill

dev_kill *number directory* [*directory...*]

df

df [-t] [-f] [-T] [*file...*]

diction

diction [-ml] [-mm] [-n] [-f *pfile*] *file...*
explain

diff

diff [-l] [-r] [-s] [-S*name*] [-cefh] [-b] *dir1 dir2*
diff [-cefh] [-b] *file1 file2*
diff [-D*string*] [-b] *file1 file2*

diff3

diff3 [-3] [-e] [-x] *file1 file2 file3*

diffmk

diffmk [-] *file1 file2 file3*

dircmp

dircmp [-d] [-s] [-w*n*] *dir1 dir2*

dirname

See basename.

dis

dis [-d *sec*] [-da *sec*] [-F *function*] [-l *string*] [-L] [-o] [-t *sec*] [-V] *file ...*

disable

See enable.

diskformat

diskformat [-dens *n*] [-head 0] *floppy-device*
diskformat [-cyl *s*[-[*e*]]] [-size 532] *hard-disk-device*

diskusg

diskusg [-i *ignlist*] [-p *pw-file*] [-s] [-u *outfile*] [-v] [*file...*]

dodisk

See acctsh.

domainname

domainname [*name-of-domain*]

dp

dp [-q] [-u] *file*

dslipuser

/etc/dslipuser

du

du [-a] [-r] [-s] [*names*]

dump

dump [[-a] [-c] [-f] [-g] [-h] [-l] [-o] [-r] [-s] [-t] [-z *name*]] [[-d *number*] [+d *number*] [-n *name*] [-p] [-t *index*] [+t *index*] [-u] [-v] [-z *name*,*number*] [+z *name*]] *file* ...

dump.bsd

/etc/dump.bsd [-T*file-system-type*] [*key*]... [*argument*...] [*filesystem*]
/etc/rdump [-T*file-system-type*] [*key*]... [*argument*...] [*filesystem*]

e

See ex.

echo

echo [*arg*] ...

ed

ed [-] [-p *string*] [-x] [*file*]
red [-] [-p *string*] [-x] [*file*]

edit

See ex.

efl

efl [-#] [-C] [-w] [*file* ...]

egrep

See `grep`.

eject

`eject [0] [1] [/dev/rdsk/`*name*`]`

enable

`enable` *printers*
`disable [-c] [-r[`*reason*`]]` *printers*

enscript

`enscript [-12BGghKklmoqRr] [-L`*lines*`] [-f`*font*`] [-F`*hfont*`] [-b`*header*`] [-p`*out*`] [`*spoolopts*`] [`*files*`]`

env

`env [-] [`*name=value*`]... [`*command args*`]`

environ

```
extern char **environ;
```

eqn

`eqn [-d`*xy*`] [-p`*n*`] [-s`*n*`] [-f`*n*`] [-T`*tty-type*`] [-] [`*file...*`]`
`checkeq [`*file...*`]`

eqnchar

`eqn /usr/pub/eqnchar [`*options*`] [–] [`*files*`] | troff [`*options*`]`
`eqn /usr/pub/cateqnchar [`*options*`] [–] [`*files*`] | troff [`*options*`]`
`neqn /usr/pub/eqnchar [`*options*`] [–] [`*files*`] | troff [`*options*`]`
`eqn -Taps /usr/pub/apseqnchar [`*options*`] [–] [`*files*`] | troff [`*options*`]`

errdead

`/etc/errdead` *dumpfile* [*namelist*]

errdemon

`/usr/lib/errdemon [`*file*`]`

errpt

`errpt [–a] [–`*dev*`] [–e` *date*`] [–f] [–p` *n*`] [–s` *date*`] [`*file...*`]`

errstop

/etc/errstop [*namelist*]

esch

esch [-b] [-c*cluster-number*] [-f] [-v]

escher

escher [-y] [-m]
escher *file...*

etheraddr

/etc/etheraddr [*slot*]

eu

/etc/eu *file*

eupdate

/etc/eupdate

ex

ex [–] [+*command*] [–r] [–R] [–t *tag*] [–v] [–x] *name...*
e *ex-arguments*
edit [–] [+*command*] [–r] [–R] [–t *tag*] [–v] [–x] *name...*

expand

expand [-*tabstop*] [-*tab1*, *tab2*, ..., *tabn*] [*file...*]
unexpand [-a] [*file...*]

explain

See diction.

expr

expr *arguments*

exterr

exterr /dev/*devicename* [*choice*]

f77

f77 [–1] [–66] [–c] [–C] [–E] [–f] [–F] [–g] [–I[24s]] [–m]
[–o*output*] [–O] [–onetrip] [–p] [–R] [–S] [–u] [–U] [–w] *file*
...

factor

factor [*number*]

false

See true.

fcntl

#include <fcntl.h>

fcnvt

fcnvt [-i *input-format*] [-o *output-format*] [-f] *input-file output-file*
fcnvt [-i *input-format*] -s [-f] *input-file output-file*
fcnvt [-i *input-format*] -d [-f] *input-file output-file*
fcnvt [-i *input-format*] -t [-f] *input-file output-file*
fcnvt [-i *input-format*] -p [-f] *input-file output-file*
fcnvt [-i *input-format*] -b [-f] *input-file output-file*
fcnvt [-i *input-format*] -m [-f] *input-file output-file*

ff

/etc/ff [-a*n*] [-c*n*] [-i*inode-list*] [-I] [-l] [-m*n*] [-n*file*] [-p*prefix*] [-s] [-u] *special*

fgrep

See grep.

file

file [-c] [-f *ffile*] [-m *mfile*] *arg* ...

finc

finc [-a *n*] [-c *n*] [-m *n*] [-n *file*] *file-system raw-tape*

find

find *pathname-list expression*

finger

finger [-b] [-f] [-h] [-i] [-l] [-m] [-p] [-q] [-s] [-w] [*name...*]

fingerd

/usr/etc/in.fingerd

finstall

finstall

fish

/usr/games/fish

fmt

fmt [*name...*]

fold

fold [*–width*] [*file...*]

font

troff -T*tty-type* ...

fortune

/usr/games/fortune

fpr

fpr

frec

/etc/frec [–p*path*] [–f*reqfile*] *raw-tape inumber*: *name* ...

freq

freq [*file...*]

from

from [–s *sender*] [*user*]

fsck

/etc/fsck -T 5.2 [-y] [-n] [-m*timeout*] [-s*X*] [-S*X*]
[-t*file*] [-q] [-D*options...*] [-f] [-p*passtostart*]
[*svfs-filesystem...*]
/etc/fsck [-b*block-number*] [-y] [-n] [-m*timeout*] -T 4.2
[-p*passtostart*] [*ufs-filesystem...*]

fsdb

/etc/fsdb [-T4.2] [-?] [-o] [-p*string*] [-w] *special*
/etc/fsdb [-T5.2] *special* [-]

fsentry

fsentry –t*type* [–o *optlist*] [–d *dumpfreq*] [–p *passno*] [–n] [–f] *file-system mount-point*

fsirand

fsirand [-p] [-T*file-system-type*] *special*

fsplit

fsplit [-e] [-f] [-s] *file* ...

fsstat

fsstat [-T*file-system-type*] *file-system*

fstyp

fstyp *file*

ftp

ftp [-v] [-d] [-i] [-n] [-g] [*host*]

ftpd

/usr/etc/in.ftpd [–d] [–l] [–t*timeout*]

fuser

/etc/fuser [–] [–k] [–n*namelist*] [–u] *file*...

fwdload

fwdload [-a] [-v] [-f*dev*] [-n*name*] *filename*

fwd_lkup

fwd_lkup [-f*dev*] [-v]

fwtmp

/usr/lib/acct/fwtmp [–ic]
/usr/lib/acct/wtmpfix [*files*]

get

get [-a*seq-no*] [-b] [-c*cutoff*] [-e] [-g] [-i*list*] [-k] [-l[p]] [-m] [-n] [-p] [-r*SID*] [-s] [-t] [-w*string*] [-x*list*] *file*...

getopt

getopt [*flag-letter*[:]]... [*input-string*]

getty

/etc/getty [-h] [-t*timeout*] *line* [*speed* [*type* [*linedisc*]]]
/etc/getty -c *file*
/etc/apm_getty *getty-options*

grap

grap [-T*tty-type*] [-l] [-] [*file...*]

graph

graph [-a [*sp*] [*st*]] [-b] [-c*label*] [-g [*style*]] [-h *hspace*] [-l *title*] [-m [*mode*]] [-r *rspace*] [-s] [-t] [-u *uspace*] [-w *wspace*] [-x [*l*] [*a*] [*b*] [*c*]] [-y [*l*] [*a*] [*b*] [*c*]]

greek

greek [-T*terminal*]

greek

cat /usr/pub/greek [|greek -T*terminal*]

grep

grep [-b] [-c] [-i] [-n] [-s] [-v] *expression* [*file...*]
egrep [-b] [-c] [-e *expression*] [-f *file*] [-i] [-n] [-v] [*expression*] [*file...*]
fgrep [-b] [-c] [-e *expression*] [-f *file*] [-i] [-n] [-v] [-x] [*strings*] [*file...*]

groups

groups [*user*]

grpck

See pwck.

hangman

/usr/games/hangman [*arg*]

hashcheck

See spell.

hashmake

See spell.

head

head [-*count*] [*file...*]

help

help [*args*]

hex

hex [-f] [-l] [-n#] [-r] [-s0] [-s2] [-ns8] [+*saddr*] *ifile*

hostid

hostid [*identifier*]

hostname

hostname [*nameofhost*]

hyphen

hyphen [*file...*]

icmp

None; included automatically with inet(5F).

id

id

ident

ident *files*

ifconfig

/etc/ifconfig *interface* [*address* [*dest-address*]]
[*parameter...*]
/etc/ifconfig *interface* [*protocol-family*]

indent

indent *input* [*output*] [*flags*]

indxbib

indxbib *database...*

inet

```
#include <sys/types.h>
#include <netinet/in.h>
```

inetd

/etc/inetd [-d]

init

/etc/init [0123456SsQqabc]

install

/etc/install [-c *dira*] [-f *dirb*] [-g *group*] [-i] [-m *mode*] [-n *dirc*] [-o] [-s] [-u *user*] *file* [*dirx*...]

ip

```
#include <sys/socket.h>
#include <netinet/in.h>
```

ipcrm

ipcrm [-m *shmid*] [-M *shmkey*] [-q *msqid*] [-Q *msgkey*] [-s *semid*] [-S *semkey*]

ipcs

ipcs [-a] [-b] [-c] [-C *corefile*] [-m] [-N *namelist*] [-o] [-p] [-q] [-s] [-t]

isotomac

See mactoiso.

iw2

iw2 [-a *dotspace*] [-b] [-c *color*] [-d] [-D *udcfile*] [-f] [-h] [-k *mode*] [-l *language*] [-m *margin*] [-n *length*] [-o *file*] [-p *pitch*] [-q *quality*] [-s *spacing*] [-t *tabs*] [-u] [-U *udcfile*] [-w *value*] [-x] [-z] [*file*...]

iwprep

iwprep [*file*]

join

join [-a*n*] [-e *string*] [-j*n m*] [-o *list*] [-t*c*] *file1 file2*

kconfig

/etc/kconfig [-a [-v] [-V]] [-n*namelist*]

kermit

kermit [*option*...] [*file*...]

keyset

/etc/keyset [*keyboard*] [*country*]

kill

kill [*-sig*] *pid...*

killall

/etc/killall [-n *namelist*] [*signal*]

ksh

ksh [-a] [-e] [-f] [-h] [-i] [-k] [-m] [-n] [-o] [-p] [-r] [-s] [-t] [-u] [-v] [-x] [-o *option*]... [-c *string*] [*arg...*]

labelit

See volcopy.

last

last [*name...*] [*tty...*]

lastlogin

See acctsh.

launch

launch -[it] *filename* [*document...*]
launch -p[it] *filename document...*

launch

launch [-a] [-d] [-f] [-m] [-r] [-v] [-s] [*pathname*]
launch [-n] [-d] [-f] [-m] [-r] [-v] [-s] [*pathname*]

lav

lav

ld

ld [-e*epsym*] [-f*fill*] [-l*x*] [-m] [-o*outfile*] [-r] [-s] [-t] [-u*symname*] [-x] [-z] [-F] [-L*dir*] [-M] [-N] [-V] [-VS*num*] *file...*

leave

leave [*hhmm*]

lex

lex [-c] [-n] [-t] [-v] [*file*]...

life

/usr/games/life [-r]

line

line

line_sane

/etc/line_sane [*fildes*]

lint

lint [-a] [-b] [-D*name*[=*def*]] [-h] [-I*dir*] [-l*x*] [-n] [-o *lib*] [-p] [-u] [-U*name*] [-v] [-x] *file...*

ln

ln [-s] *name1* [*name2*]
ln *name... directory*
ln -f *directory1 directory2*

lo

pseudo-device loop

lockd

/etc/rpc.lockd [-t *timeout*] [-g *graceperiod*]

login

login [*name* [*env-var...*]]

Login

Login [-- [-r] [-g]]

logname

logname

lookbib

lookbib [-n] *database*

lorder

lorder *file ...*

lp

lp [-c] [-d*dest*] [-m] [-n*number*] [-o*option*] [-s] [-t*title*] [-w] [*file...*]
cancel *jobno...* [*printers*]
cancel *printers* [*jobno*]...

lpadmin

/usr/lib/lpadmin -p*printer* [-c*class*] [-e*printer*] [-h]
[-i*interface*] [-l] [-m*model*] [-r*class*] [-v*device*]
/usr/lib/lpadmin -x*dest*
/usr/lib/lpadmin -d[*dest*]

lpc

/etc/lpc [*command* [*argument* ...]]

lpd

/usr/lib/lpd [-l] [*port #*]

lpmove

See lpsched.

lpq

lpq [+[*n*]] [-l] [-P*printer*] [*job #* ...] [*user* ...]

lpr

lpr [-P*printer*] [-#*num*] [-C *class*] [-J *job*] [-T *title*]
[-i [*numcols*]] [-1234 *font*] [-w*num*] [-pltndgvcfrmhs]
[*name* ...]

lprm

lprm [-P*printer*] [-] [*jobno*]... [*user*]...

lpsched

/usr/lib/lpsched
/usr/lib/lpshut
/usr/lib/lpmove *requests dest*
/usr/lib/lpmove *dest1 dest2*

lpshut

See lpsched.

lpstat

lpstat [-a[*list*]] [-c[*list*]] [-d] [-o[*list*]] [-p[*list*]] [-r] [-s]
[-t] [-u[*list*]] [-v[*list*]]

lptest

lptest [*length* [*count*]]

ls

ls [-R] [-a] [-d] [-C] [-x] [-m] [-l] [-L] [-n] [-o] [-g] [-r] [-t] [-u] [-c] [-p] [-F] [-b] [-q] [-i] [-s] [*names*]

m4

m4 [-B*int*] [-e] [-H*int*] [-s] [-S*int*] [-T*int*] [-D*name*[=*val*]] [-U*name*] [*file...*]

m68k

See machid.

machid

m68k
pdp11
u3b
u3b2
u3b5
u3b15
vax

macquery

macquery [-t *timeout*] [-a] [-c] [-n] [-s] *resource-file alertID* [*parm1 ... parm4*]

macref

macref [-t] [-s] [-n] [--] *file...*

macsysinitrc

See brc.

mactoiso

mactoiso [-c *char*] [*file*]
isotomac [-c *char*] [*file*]

mail

mail [-e] [-f*file*] [-p] [-q] [-r] [-t] *address ...*
rmail [-t] *address ...*

mailq

mailq [-v]

mailx

mailx [-d] [-e] [-f [*filename*]] [-F] [-h *number*] [-H] [-i]
[-n] [-N] [-r *address*] [-s *subject*] [-u *user*] [-U] [*name* ...]

make

make [-b] [-B] [-d*digits*] [-e] [-f *description-file*] [-g] [-i]
[-k] [-K] [-n] [-p] [-P] [-q] [-r] [-s] [-t] [-u] [*target*...]

makedbm

makedbm [-i *yp-input-file*] [-o *yp-output-name*]
[-d *yp-domain-name*] [-m *yp-master-name*] *infile outfile*
makedbm [-u *dbmfilename*]

makedev

makedev *files*

makekey

/usr/lib/makekey

man

man [-c] [-d] [-T*term*] [-w] [*section*] *name* [*section name*...]

man

nroff -man *files*
troff -man [-rs1] *files*

mastermind

/usr/games/mastermind

math

#include <math.h>

maze

/usr/games/maze

me

nroff -me [*nroff-options*...]
troff -me [*troff-options*...]

merge

merge [-p] *file1 file2 file3*

mesg

mesg [*choice*]

mkdir

mkdir *dirname* ...

mkfs

/etc/mkfs *device-file blocks*[:*inodes*] [*gap modulus*]
/etc/mkfs *device-file proto* [*gap modulus*]

mkfs1b

/etc/mkfs1b *special blocks*[:*inodes*] [*m n*]
/etc/mkfs1b *special proto* [*m n*]

mklost+found

mklost+found

mknod

/etc/mknod *name type* [*major minor*]
/etc/mknod *name* p

mkshlib

mkshlib -s *specs* [-n] -t *target* [-h *host*]

mkslipuser

/etc/mkslipuser

mkstr

mkstr [–] *messagefile prefix file* ...

mm

mm [-T*tty-type*] [-12] [-c] [-e] [-t] [-E] [*file*...]

mm

mm [*options*] [*files*]
nroff –mm [*options*] [*files*]
nroff –cm [*options*] [*files*]
mmt [*options*] [*files*]
troff –mm [*options*] [*files*]

mmt

mmt [-a] [-e] [-t] [-p] [-g] [-T*tty-type*] [-D*dest*] [-z] [*file*...]

module_dump

module_dump *kernel*

monacct

See acctsh.

moo

/usr/games/moo

more

more [-c] [-d] [-f] [-l] [-*n*] [-s] [-u] [+*linenumber*] [*name* ...]
more [-c] [-d] [-f] [-l] [-*n*] [-s] [-u] [+/*pattern*] [*name* ...]
page *more-arguments*

mount

/etc/mount [-p]
/etc/mount -a [frv] [-t *type*] [-T *type*]
/etc/mount [-frv] [-t *type*] [-T *type*] [-o *options*] *device-file mount-point*
/etc/umount [-v] -h *host*
/etc/umount -a[v]
/etc/umount [-v] [*device-file*]...
/etc/umount [-v] [*mount-point*]...

mountd

/usr/etc/rpc.mountd

mptx

nroff -mptx [*options*] [*files*]
troff -mptx [*options*] [*files*]

ms

nroff -ms [*nroff-options...*]
troff -ms [*troff-options...*]

mt

mt [-f*device-file*] *command* [*count*]

mv

mv [-i] [-f] [-] *file1 file2*
mv [-i] [-f] [-] *file... directory*

mv

mvt [-a] [*options*] [*files*]
troff [-a] [-rX1] -mv [*options*] [*files*]

mvt

mvt [-a] [-e] [-t] [-p] [-g] [-T*tty-type*] [-D*dest*] [-z] [*file...*]

named

named [-d *debuglevel*] [-p *port#*] [*bootfile*]

ncheck

/etc/ncheck [-a] [-i *i-node-numbers*] [-s] [-T*file-system-type*] [*file-system*]

ncstats

ncstats

ndx

ndx *subjfile formatter-command-line*

neqn

neqn [-d*xy*] [-p*n*] [-s*n*] [-f*n*] [-] [*file...*]

netstat

netstat [-Aan] [-f *address-family*] [*system*] [*core*]
netstat [-himnrs] [-f *address-family*] [*system*] [*core*]
netstat [-n] [-I *interface*] *interval* [*system*] [*core*]

newaliases

newaliases

newconfig

/etc/newconfig [-v] [nonet] [*module*]... [no*module*]...

newform

newform [-a*n*] [-b*n*] [-c*char*] [-e*n*] [-f] [-i*tabspec*] [-l*n*] [-o*tabspec*] [-p*n*] [-s] [*file...*]

newfs

/etc/newfs [-v] [*options*] *device-file type*

newgrp

newgrp [-] [*group*]

news

news [–a] [–n] [–s] [*items*]

newunix

/etc/newunix [[no]*module*] ...

nfsd

/etc/nfsd [*nserver...*]
/etc/biod [*nserver...*]

nfsstat

nfsstat [–csnrz]

nice

nice [–*increment*] *command* [*arguments*]

nl

nl [–b*type*] [–d*delim*] [–f*type*] [–h*type*] [–i*incr*] [–l*num*]
[–n*format*] [–p] [–s*sep*] [–v*start#*] [–w*width*] *file*

nm

nm [–d] [–e] [–f] [–h] [–n] [–o] [–T] [–u] [–v] [–V] [–x]
file ...

nohup

nohup *command* [*arguments*]

nroff

nroff [–o*list*] [–n*N*] [–s[*N*]] [–r*aN*] [–i] [–q] [–z] [–m*name*]
[–T*tty-type*] [*file...*]

nslookup

nslookup
nslookup - *server*
nslookup *host-to-find* [*server*]

nterm

nulladm

See acctsh.

number

/usr/games/number

od

od [–b] [–c] [–d] [–o] [–s] [–x] [*file*] [[+]*offset* [.][b]]

otroff

otroff [–c*name*] [–k*name*] [–t] [–f] [–w] [–b] [–p*N*] [*file...*]

pac

/etc/pac [–P*printer*] [–p*price*] [–s] [–r] [–c] [–m] [*name*]...

pack

pack [–] [–f] *name* ...
pcat *name* ...
unpack *name* ...

page

See more.

pagesize

pagesize

passwd

passwd [*name*]

paste

paste *file1 file2* ...
paste –d*list file1 file2* ...
paste –s [–d*list*] *file1 file2* ...

pax

pax [–cimopuvy] [–f *archive*] [–s *replstr*] [–t *device*] [*pattern*]...
pax –r [–cimnopuvy] [–f *archive*] [–s *replstr*] [–t *device*] [*pattern*]...
pax –w [–adimuvy] [–b *blocking*] [–f *archive*] [–s *replstr*] [–t *device*] [–x *format*] [*pathname*]...
pax –rw [–ilmopuvy] [–s *replstr*] [*pathname*]... *directory*

pcat

See pack.

pdp11

See machid.

pg

pg [-*number*] [+*linenumber*] [+/*pattern*] [-c] [-e] [-f] [-n] [-p *string*] [-s] [*file...*]

pic

pic [-T*tty-type*] [-] [*file...*]

ping

/usr/etc/ping *host* [*timeout*]

pname

/bin/pname [-a] [-c *controller*] [-d *disk*] [-s *slice*] [-t *type*] *name*
/bin/pname [-p]
/bin/pname -a[v]
/bin/pname -u *device-file* [*device-file...*]

portmap

/etc/portmap

powerdown

/etc/powerdown

powerfail

See brc.

pr

pr [+*k*] [-*k*] [-a] [-d] [-e*ck*] [-f] [-h *head*] [-i*ck*] [-l*k*] [-m] [-n*ck*] [-o*k*] [-p] [-r] [-s*c*] [-t] [-w*k*] [*file...*]

prctmp

See acctsh.

prdaily

See acctsh.

printenv

printenv [*argument*]

prof

prof [-a] [-c] [-g] [-h] [-m *mdata*] [-n] [-o] [-s] [-t] [-x] [-z] [*prog*]

prof

```
#define MARK
#include <prof.h>
void MARK (name)
```

prs

prs [-a] [-c [*date-time*]] [-d [*dataspec*]] [-e] [-l] [-r [*SID*]] *file* ...

prtacct

See acctsh.

ps

ps [-e] [-d] [-a] [-f] [-l] [-c*corefile*] [-s*swapdev*] [-n*namelist*] [-t*termlist*] [-p*proclist*] [-u*uidlist*] [-g*grplist*]

psbanner

See transcript.

pscomm

See transcript.

psdit

psdit [-F *fontdir*] [-p *prologue*] [-o *list*] [*file*]

psinterface

See transcript.

psroff

psroff [-t] [*troff-option...*] [*spool-option...*] [*file...*]

psrv

See transcript.

pstat

pstat [-p [-a]] [-b] [-i] [-m] [-n*namelist*] [-r*rate*] [-t] [-u*address*] [-v [*file*]

pstext

See transcript.

ptx

ptx [-b *break*] [-f] [-g *gap*] [-i *ignore*] [-o *only*] [-r] [-t] [-w *n*] [*input* [*output*]]

pwck

/etc/pwck [*file*]
/etc/grpck [*file*]

pwd

pwd

query

query [-t*seconds*] [-r[*response*]] [-m]

quiz

/usr/games/quiz [-i*file*] [-t] [*category1 category2*]

rain

/usr/games/rain

rc

See brc.

rcp

rcp *file1 file2*
rcp [-r] *file... directory*

rcs

rcs [-i] [-a*logins*]] [-A*oldfile*] [-e[*logins*]] [-c*string*] [-l[*rev*]] [-u[*rev*]] [-L] [-U] [-n*name*[:*rev*]] [-N*name*[:*rev*]] [-o*range*] [-q] [-s*state*[:*rev*]] [-t[*txtfile*]] *files*

rcsdiff

rcsdiff [-biwt] [-cefhn] [-r*rev1*] [-r*rev2*] *files*

rcsintro

rcsmerge

rcsmerge -r*rev1* [-r*rev2*] [-p] *file*

rcvhex

rcvhex [-p *port*] [-c *command*] *file*

rdist

rdist [-nqbRhivwy] [-f*distfile*] [-d*var=value*] [-m*host*] [*name...*]
rdist [-nqbRhivwy] -c *name...* [*login@*] *host* [:*dest*]

rdump

See dump.bsd.

read_disk

read_disk

reboot

/etc/reboot [-h] [-l] [-n] [-q]

red

See ed.

refer

refer [-a[*n*]] [-b] [-c *keys*] [-e] [-f*n*] [-k*x*] [-l[*m*,*n*]] [-n] [-p *bib*] [-s *keys*] [-B*l*.*m*] [-P] [-S] [*file...*]

regcmp

regcmp [-] *file* ...

regexp

```
#define INIT declarations
#define GETC() getc-code
#define PEEKC() peekc-code
#define UNGETC (c) ungetc-code
#define RETURN (pointer) return-code
#define ERROR (val) errors-code
#include <regexp.h>
char *compile(instring, expbuf, endbuf, eof)
char *instring, *expbuf, *endbuf;
int  eof ;
int step(string, exbuf)
char *string, *exbuf;
extern char *loc1, *loc2, *locs;
extern int circf, sed, nbra;
```

reject

/usr/lib/reject [-r [*reason*]] [*destination...*]

remlogin
remlogin

remsh
remsh *rhost* [-l *username*] [-n] [*command*]

remshd
/etc/in.remshd *host.port*

reset
See tset.

restore
/etc/restore [-o] [-T*file-system-type*] *key* [*argument*]...
/etc/rrestore [-o] [-T*file-system-type*] *key* [*argument*]...

rev
rev [*file*]...

revnetgroup
/etc/yp/revnetgroup [–u] [–h]

rexecd
/usr/etc/in.rexecd *host.port*

rez
rez [*option*]... [*resource-description-file*]...

rlog
rlog [-L] [-R] [-h] [-t] [-d*dates*] [-l[*lockers*]]
[-r*revisions*] [-s*states*] [-w[*logins*]] *files*

rlogin
rlogin *rhost* [–8] [–ec] [–l *username*]

rlogind
/etc/in.rlogind *host.port*

rm
rm [-f] [-i] [-r] *file*...
rmdir *dir*...

rmail

See mail.

rmdel

rmdel -r *SID file ...*

rmdir

See rm.

robots

/usr/games/robots

roffbib

roffbib [-e] [-h] [-n] [-o] [-r] [-s] [-T*term*] [-x] [-m *mac*] [-V] [-Q] [*file ...*]

route

/etc/route [-f] [-n] [*command* [*net|host*] *destination gateway* [*metric*]

routed

/etc/in.routed [-d] [-g] [-s] [-q] [-t] [*logfile*]

rpcinfo

rpcinfo -p [*host*]
rpcinfo -u *host program-number version-number*
rpcinfo -t *host program-number version-number*

rsh

See sh.

rstatd

/usr/etc/rpc.rstatd

runacct

/usr/lib/acct/runacct [*mmdd* [*state*]]

rup

rup [-h] [-l] [-t] [*host...*]

ruptime

ruptime [-a] [-l] [-t] [-u]

rusers

rusers [-a] [-h] [-i] [-l] [-u] [*host* ...]

rusersd

/usr/etc/rpc.rusersd

rwall

rwall *host1 host2* ...
rwall -n *netgroup1 netgroup2* ...
rwall -h *host* -n *netgroup*

rwalld

/usr/etc/rpc.rwalld

rwho

rwho [-a]

rwhod

/etc/in.rwhod

sa1

See sadc.

sa2

See sadc.

sact

sact *file* ...

sadc

/usr/lib/sa/sadc [*t n*] [*file*]
/usr/lib/sa/sa1 [*t n*]
/usr/lib/sa/sa2 [-u] [-b] [-y] [-c] [-w] [-a] [-q] [-v]
[-m] [-A] [-s*time*] [-e*time*] [-i*sec*]

sag

sag [-e *time*] [-f *file*] [-i *sec*] [-s *time*] [-T *term*] [-x *spec*]
[-y *spec*]

sar

sar [-u] [-b] [-y] [-c] [-w] [-a] [-q] [-v] [-m] [-A] [-o*file*] *t* [*n*]
sar [-u] [-b] [-y] [-c] [-w] [-a] [-q] [-v] [-m] [-A] [-s*time*] [-e*time*] [-i*sec*] [-f*file*]

sccs

sccs [-r] [-d*path*] [-p*path*] *command* [*flags*] [*args*]

sccsdiff

sccsdiff -r*SID1* -r*SID2* [-p] [-s*n*] *file...*

sccstorcs

sccstorcs [-t] [-v] *sccsfiles*

script

script [-a] [*file*]

sdb

sdb [-w] [-W] [*objfil* [*corfil* [*directory*]]]

sdiff

sdiff [-l] [-o *output*] [-s] [-w *n*] *file1 file2*

sed

sed [-n] -e *command-line-script* [*file...*]
sed [-n] -f *sfile* [*file...*]

sendmail

/usr/lib/sendmail [*flag...*] [*address...*]

setport

setport -r [-s *speed*] *device-file...*
setport -o [-s *speed*] *device-file...*

settc

settc *type creator* [*file*]...

settimezone

settimezone

sh

sh [-a] [-c] [-e] [-f] [-h] [-i] [-k] [-n] [-r] [-s] [-t] [-u] [-v] [-x] [*args*]
rsh [-a] [-c] [-e] [-f] [-h] [-i] [-k] [-n] [-r] [-s] [-t] [-u] [-v] [-x] [*args*]

shl

shl

showmount

showmount [-a] [-d] [-e] [*host*]

shutacct

See acctsh.

shutdown

/etc/shutdown [-hknry] [-g*interval*] [-i*initstate*] [*timeout* [*warning-message* ...]]

size

size [-d] [-o] [-V] [-x] *file*...

slattach

/etc/slattach *ttyname* [*baudrate*]

slattconf

/etc/slattconf *ttyname baudrate address dest-address* [*options*]

sleep

sleep *time*

slip

/etc/slip

sno

sno [*file*...]

soelim

soelim [*file*...]

sort

sort [-c] [-m] [-u] [-o *output*] [-y[*kmem*]] [-z*recsz*] [-d] [-f] [-i] [-M] [-n] [-r] [-b] [-t *x*] [+*pos1* [-*pos2*]] [*file...*]

sortbib

sortbib [-s*keys*] *database...*

spell

spell [-v] [-b] [-x] [-l] [+local-file] [*file...*]
/usr/lib/spell/hashmake
/usr/lib/spell/spellin *n*
/usr/lib/spell/hashcheck *spelling-list*

spellin

See spell.

spline

spline [-a] [-k] [-n] [-p] [-x]

split

split [-*n*] [*file* [*name*]]

spray

/usr/etc/spray *host* [-l *length*] [-c *count*]

sprayd

/usr/etc/rpc.sprayd

ssp

ssp [-] [*name ...*]

StartMonitor

StartMonitor

startmsg

startmsg -

startmsg [-p*numphases*] [-n*nextphase*] [-d*pcntdone*] [-m*msgselector* [*substr1 ... substr4*]] [-q]

startup

/etc/startup

startup

See acctsh.

StartupShell

StartupShell

stat

```
#include <sys/types.h>
#include <sys/stat.h>
```

statd

/etc/rpc.statd

stdhosts

/etc/yp/stdhosts *file*

strings

strings [-] [-o] [-*number*] *file* ...

strip

strip [-l] [-r] [-s] [-V] [-x] *file*...

stty

stty [-n *file*] [-a] [-g] [*options*]

style

style [-ml] [-mm] [-a] [-e] [-l *num*] [-r *num*] [-p] [-P] *file*...

su

su [-] [*name*[*arg* ...]]

subj

subj *file* ...

sum

sum [-r] *file*...

sumdir

sumdir [*directories*]

swap

/etc/swap -a [*swapdev* [*swaplow* [*swaplen*]]]
/etc/swap -d *swapdev* [*swaplow*]
/etc/swap -l

sync

sync

sysinitrc

See brc.

sysline

sysline [-b] [-c] [-d] [-e] [-h] [-D] [-i] [-l] [-m] [-p] [-q] [-r] [-s] [-j] [-H *remote*] [+*N*]

systemfolder

systemfolder [-f]

tabs

tabs [*tabspec*] [+m[*n*]] [-T*type*]

tail

tail [±[*number*][lbc[f]]] [*file*]

talk

talk *person* [*ttyname*]

talkd

/etc/talkd

tar

tar [*key*] [*file...*]

tbl

tbl [-TX] [*file...*]

tc

tc [-t] [-o *list*] [-a *n*] [-e] [*file*] ...

tcb

command-line | tcb >/dev/rmt/tc*x*

tcp

```
#include <sys/socket.h>
#include <netinet/in.h>
s = socket(AF_INET, SOCK_STREAM, 0);
```

tee

tee [–i] [–a] [*file*] ...

telinit

See `init`.

telnet

telnet [*host* [*port*]]

telnetd

/usr/etc/in.telnetd

term

test

test [*expr*]

TextEditor

TextEditor [*filename*]

tftp

tftp [*host*]

tftpd

/usr/etc/in.tftpd

tic

tic [-v[*n*]] *file* ...

time

time *command*

timex

timex [–o] [–p[fhkmrt]] [–s] *command*

tip

tip [-v] [*-speed*] *system-name*
tip [-v] [*-speed*] *phone-number*

touch

touch [-a] [-c] [-m] [*mmddhhmm* [*yy*]] *file* ...

tp

tp [*key*] [*name* ...]

tplot

tplot [-T*terminal* [-e *raster*]]

tput

tput [-T*type*] *capname*

tr

tr [-c] [-d] [-s] [*string1* [*string2*]]

transcript

/usr/lib/ps/psbanner
/usr/lib/ps/pscomm
/usr/lib/ps/psinterface
/usr/lib/ps/psrv
/usr/lib/ps/pstext

trek

/usr/games/trek [[-a] *file*]

troff

troff [-o*list*] [-n*N*] [-s*N*] [-m*name*] [-r*aN*] [-i] [-q] [-a] [-T*dest*] [*file*...]

troff

trpt

/usr/etc/trpt [-a] [-j] [-p*hex-address*] [-s] [-t] [*system*[*core*]]

true

true
false

tset

tset [-] [-a *type*] [-A] [-d *type*] [-e*c*] [-E*c*] [-k*c*] [-I] [-m *port*] [-p *type*] [-Q] [-r] [-s] [-S]
reset

tsort

tsort [*file*]

ttt

/usr/games/ttt
/usr/games/cubic

tty

tty [-l] [-s]

tty_add

tty_add [-r] [-g*speed*] *device-file-name...*
tty_kill

tty_kill

See tty_add.

tunefs

/etc/tunefs [-p] [-m*minfree*] [-d*rotdelay*] [-e*maxbpg*]
[-a*maxcontig*] [-o*optimization*] *special*

turnacct

See acctsh.

twinkle

/usr/games/twinkle [-] [+] [s *save*]] [*density1* [*density2*]]

types

#include <sys/types.h>

tzdump

tzdump [-v] [-c *cutoffyear*] [*zonename...*]

tzic

tzic [-v] [-d *directory*] [-l *localtime*] [-p *posixrules*]
[-L *leapsecondfilename*] [-s] [*filename...*]

u3b

See machid.

u3b15

See machid.

u3b2
See machid.

u3b5
See machid.

ucbdiff
ucbdiff [-l] [-r] [-s] [-S*name*] [-cefhn] [-biwt] *dir1 dir2*
ucbdiff [-cefhn] [-biwt] *file1 file2*
ucbdiff [-D*string*] [-biw] *file1 file2*

ucbdiff3
ucbdiff3 [-exEX3] *file1 file2 file3*

udp
```
#include <sys/socket.h>
#include <netinet/in.h>
s=socket(AF_INET, SOCK_DGRAM, 0);
```

ul
ul [-t *terminal*] [*name* ...]

umount
See mount.

uname
uname [-a] [-m] [-n] [-r] [-s] [-v]

uncompact
See compact.

uncompress
See compress.

unexpand
See expand.

unget
unget [-n] [-r*SID*] [-s] *file*...

uniq
uniq [-u] [-d] [-c] [+*n*] [-*n*] [*input* [*output*]]

units

units

unpack

See pack.

updater

updater [*key*] *local remote* ...

uptime

uptime

users

users [*file*]

uucico

/usr/lib/uucp/uucico [-d*spooldir*] [-g*grade*] [-r*role*] [-R] [-s*system*] [-x*debug*] [-L] [-t*turnaround*]
/usr/lib/uucp/uushell

uuclean

/usr/lib/uucp/uuclean [-d*directory*] [-m*file*] [-n*time*] [-p[*pre*]] [-s*sys*] [-w*file*]

uucp

[-c] [-C] [-d] [-e*sys*] [-f] [-j] [-m*file*] [-n*user*] [-r] *source-files destination-file*
uulog [-s*sys*] [-u*user*]
uuname [-l] [-v]

uudecode

See uuencode.

uuencode

uuencode [*source*] *remotedest*
uudecode [*file*]

uulog

See uucp.

uuname

See uucp.

uupick

See uuto.

uusend

uusend [-m*mode*] *sourcefile sys1*!*sys2*!...!*remotefile*

uushell

See uucico.

uustat

uustat [-c*hour*] [-j*jobn*] [-k*jobn*] [-m*mch*] [-M*mch*] [-o*hour*] [-O] [-q] [-r*jobn*] [-s*sys*] [-u*user*] [-y*hour*]

uusub

/usr/bin/uusub [-a*sys*] [-c*sys*] [-d*sys*] [-f] [-l] [-r] [-u*hr*]

uuto

uuto [-m] [-p] *source-files destination*
uupick [-s*system*]

uux

uux [-] [-g*grade*] [-j] [-l] [-m*file*] [-n] [-p] [-r] [-x*level*] [-z] *command-string*

uuxqt

/usr/lib/uucp/uuxqt [-x*debug*]

val

val -
val [-m*name*] [-r*SID*] [-s] [-y*type*] *file...*

values

#include <values.h>

vax

See machid.

vc

vc [-a] [-c*char*] [-s] [-t] [*keyword=value*]...

vedit

See vi.

version

version *name...*

vi

vi [+*command*] [-l] [-r [*file*]] [-R] [-t *tag*] [-w*n*] [-x] *name...*
view [+*command*] [-l] [-r [*file*]] [-R] [-t *tag*] [-w*n*] [-x] *name...*
vedit [+*command*] [-l] [-r [*file*]] [-R] [-t *tag*] [-w*n*] [-x] *name...*

view

See vi.

vipw

vipw

volcopy

/etc/volcopy [-a] [-bpi*density*] [-buf] [-feet*size*] [-reel*num*] [-s]*fsname special1 volname1 special2 volname2*
/etc/labelit *special* [*fsname volume* [-n]]

w

w [-h] [-u] [-s] [-l] [*user*]

wall

/etc/wall

wc

wc [-c] [-l] [-w] [*name...*]

what

what [-s]*file ...*

whatis

whatis *command ...*

whereis

whereis [-b] [-m] [-s] [-u] [-B *dir* [-f]] [-M *dir* [-f]] [-S *dir* [-f]] *name ...*

which

which [*name...*]

who

who [-a] [-b] [-d] [-H] [-l] [-p] [-q] [-r] [-s] [-t] [-T] [-u] [*file*]
who am i
who am I

whoami

whoami

whodo

/etc/whodo

worm

/usr/games/worm [*size*]

worms

/usr/games/worms [-field] [-length *n*] [-number *n*] [-trail]

write

write *user* [*line*]

wtmpfix

See fwtmp.

wump

/usr/games/wump

xargs

xargs [*flags*] [*command* [*initial-arguments*]]

xstr

xstr [-] [-c] [*file*]

yacc

yacc [-d] [-l] [-t] [-v] *grammar*

yes

yes [*expletive*]

ypbind

See ypserv.

ypcat

ypcat [-k] [-t] [-d *domainname*] *mname*
ypcat -x

ypinit

ypinit -m
ypinit -s *master-name*

ypmake

cd /etc/yp; make [*map*] [*variable...*]

ypmatch

ypmatch [-d*domain*] [-k] [-t] *key... mname*
ypmatch -x

yppasswd

yppasswd [*name*]

yppasswdd

/usr/etc/rpc.yppasswdd *file* [-m *arg1 arg2...*]

yppoll

yppoll [-h *host*] [-d *domain*] *mapname*

yppush

yppush [-d *domain*] [-v] *mapname*

ypserv

/etc/ypserv
/etc/ypbind

ypset

ypset [-V1] [-h *host*] [-d *domain*] *server*
ypset [-V2] [-h *host*] [-d *domain*] *server*

ypwhich

ypwhich [-d[*domain*]] [-V1] [*hostname*]
ypwhich [-d[*domain*]] [-V2] [*hostname*]
ypwhich [-t *mapname*] [-d *domain*] -m [*mname*]
ypwhich -x

ypxfr

ypxfr [-f] [-h *host*] [-d *domain*] [-c] [-C *tid prot ipadd port*] *mapname*

zcat

See compress.

Index

Fortran facilities

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Writers: Mike Elola, George Towner, and Kathy Wallace
Production Supervisor: Josephine Manuele

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