A/UX Reference Summary and Index

Release 3.0

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A/UX Reference Summary and Index

Contents

About This Manual

This manual is one of the secondary A/UX reference manuals. It supplements each of the three primary manuals: *A/UX Command Reference*, *A/UX Programmer's Reference*, and *A/UX System Administrator's Reference*. The *A/UX Reference Summary and Index* is designed to help you find information in the other reference volumes.

The reference books cited above, from 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.

Because all of these reference manuals are not intended to be tutorials or learning guides, they should not be the first A/UX books you read. If you are new to A/UX or are unfamiliar with a specific functional area (such as the Finder), you should first read *A/UX Essentials* and the other A/UX user guides. After you have worked with A/UX, the reference manuals can 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.

Locating information in the reference manuals

You can locate information in the reference manuals with the help of the following sections in each of the primary reference manuals:

- Table of contents. Each reference manual contains one general table of contents for the entire manual. Located at the beginning of each new section of manual pages is a detailed table of contents. (If a section must span from one binder to another, a tailored table of contents is provided for each of the subdivisions.) The general table of contents lists the sections covered in the complete manual. The detailed table of contents lists the manual pages contained within one section (or section subdivision) along with a brief description of the A/UX provision that is covered in each manual page.
- Query commands. The `man`, `whatis`, and `apropos` commands display on-screen all the information contained in a manual page or just the information in the "Name" section of one or more manual pages that

satisfy a search criterion. A section that appears later in this preface, ''Using the Online Documentation,'' tells you how to use the online versions of the manual pages.

- This book, *A/UX Reference Summary and Index.* This separate manual is considered part of the A/UX set of reference manuals, but it is not a ''standard'' resource like the other reference materials. Its primary purpose is to help you locate the manual pages you need. From its summaries, you might also occasionally find all the information you required. It contains the following subsections:
  - ''Commands by Function.'' This subsection classifies the A/UX user and system administrator commands by the general or most important function each performs. The summary gives you a broader view of the commands that are available and the context in which each is often used. Each command is mentioned just once in this listing.
  - ''Command Synopses.'' This subsection is a compact collection of syntax descriptions for all of the commands in *A/UX Command Reference* and in *A/UX System Administrator's Reference*. It may help you find the syntax of commands more quickly when the syntax is all you need.
  - ''Index.'' The index lists key terms associated with A/UX subroutines and commands. These key terms can help you locate the manual page you need as you browse through keyword-related commands and subroutines.

Using this manual

This manual contains three parts, separated by tab dividers. Each part is to be used differently.

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 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.

This command summary 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'' and

"Formatting Text Into Pages for Printing."

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 lists of A/UX commands for functions and tasks within the major category.

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

change login password.....`passwd`

To change a password, you are directed to the `passwd` command. The brief function description ("change login password" in this example) applies to the command (`passwd`).

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 helps you construct command lines.

This 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.

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 section works like an ordinary index, except that a short description is included along with each reference. This description, plus the index topic help you quickly determine whether a reference contains the information you want. Once you determine that you want to view a manual page, the parenthetical section number helps you find the correct book in which to look. Suppose you have located a reference to `adduser`(1M). The sections that appear in each of the reference manuals are listed on the book front cover and spine. Section 1M appears on the spine of *A/UX System Administrator's Reference*. Accordingly, that is where you can find the full text of `adduser`(1M). Also, see "Using the Online Documentation," later in the preface.

The key terms in this index were constructed by examining the meaning and usage of the A/UX manual pages. They are 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.

Visual conventions for the A/UX reference manuals

A/UX books follow specific styling conventions. For example, words that require special emphasis appear in specific fonts or styles. This section describes the conventions used in all the A/UX reference books.

The Courier font

Throughout the A/UX reference manuals, words that appear on the screen or that you must type exactly as shown are in the Courier font.

Here's an example:

> Type `date` on the command line and press RETURN.

This instruction means that you should type the word "date" exactly as shown, then press the RETURN key.

After you press RETURN, text such as this will appear on the screen:

```
Fri Nov  1 11:15:43 PST 1991
```

In this case, the Courier font is used to represent exactly what appears on the screen.

All A/UX manual page names are shown in the Courier font. For example, `ls`(1) indicates that `ls` is the name of a manual page that occurs in Section 1. More information about the use of the Courier font in manual pages is given in "Styling of A/UX Command Elements" later in this preface.

Font styles

Italics are used to indicate that a word or set of words is a placeholder for part of a command line. Here is a sample command syntax illustration:

```
cat file
```

The italicized term *file* is a placeholder for the name of a file. If you wanted to display the contents of a file named `Elvis`, you would type the filename `Elvis` in place of *file*. In other words, you would enter

```
cat Elvis
```

Styling of A/UX command elements

A/UX commands are entered in accordance with their command syntax. A typical A/UX command line includes the command name first, followed by options and arguments. For example, here is an illustration of the syntax for the `wc` command:

```
wc [-l] [-w] file...
```

In this syntax illustration, `wc` is the command, `-l` and `-w` are options, and *file* is an argument.

A ''command option'' modifies the action of a command, often by changing its mode of operation (such as read mode or write mode).

An ''argument'' is any element that follows the command name. Command arguments other than command options typically specify the objects upon which the command should act. You often supply the names of files that you want a command to process, so *file* is frequently the last element in syntax illustrations.

Brackets and ellipsis characters in a syntax illustration should be considered part of a syntax notation. This is represented by the use of body font instead of Courier for these characters. Their font treatment tells you that you are not supposed to type these characters as part of the command line. Their meaning as a syntax notation is described next.

The brackets enclose an optional item or a group of optional items. If an optional item has constituent parts that are also optional, these parts are themselves enclosed in brackets, as in this syntax illustration:

```
lpr [-i [numcols]]
```

This syntax illustration shows that the indent (`-i`) command option can be followed by the number of columns to indent the printed page. It also shows that

you can omit the number of columns; if you do, the `lpr` command uses the default indent value.

An ellipsis (...) follows an argument that can be repeated any number of times on a command line. If the ellipsis follows a bracketed group of items, the group of items can be repeated any number of times on the command line.

Mutually-exclusive command options cannot be specified within the same command-line request. For commands that have mutually-exclusive options, two or more command-line syntaxes are offered:

```
pax -r[other-option-for-archive-reading]...
pax -w[other-option-for-archive-writing]...
```

Outside of syntax illustrations, command options are shown with a leading hyphen also in the Courier font. When you supply multiple command options in an actual command line, only one leading hyphen is normally required. For example the following command line contains two options, `-r` and `-f`:

```
pax -rf /dev/rfloppy0
```

In the example, the `-f` option (pronounced "minus f") is entered without its own hyphen, even though when mentioned in running text it appears with a leading hyphen.

Using the online documentation

In addition to the paper documentation in the reference manuals, A/UX provides several ways to search and read the contents of each manual page from your A/UX system. An advantage to the online version of the documentation is that the computer performs the work of filtering out (or skipping) all the manual pages other than the one you specifically queried. The only prerequisite is that you already know its name (or a proper search string). However, you don't have to know how manual pages are organized by section numbers and by book titles.

To display a manual page on your screen, enter the `man` command followed by the name of the manual page you want to see. For example, to display the manual page for the `cat` command, including its description, syntax, options, and other pertinent information, you would enter

```
man cat
```

After the first screen of the text of a manual page appears, you can display subsequent screens of the text with each press of the SPACE BAR, until you reach

the end of the man page. To display subsequent text one line at a time, press RETURN instead of the SPACE BAR. By pressing Q, you can quit the `man` command before viewing all of the manual page.

To display the descriptive information in the "Name" section of any manual page, enter the `whatis` command followed by the name of the provision you want described. In the following example, the command prompt is the percent sign, and the provision that is being queried is the `ls` command:

```
% whatis ls
ls(1)              - lists the contents of a directory
% 
```

To display a list of all manual pages whose "Name" sections contain a given keyword or string, enter the `apropos` command followed by a search word or search string enclosed in double quote characters. The names of A/UX provisions are listed on separate lines along with the descriptive information in the "Name" section of the manual page that describes those provisions. Sometimes several A/UX provisions are listed on the same line. In those cases, several A/UX provisions are described on a single manual page. You can tell which of these names is the formal name for the manual page because it will be followed by parentheses and an enclosed section number. In the following example, the command prompt is the percent sign, and the A/UX provisions that are queried are those which are described in manual pages whose "Name" section contains the word "tape":

```
% apropos tape
mt(1)           - magnetic tape manipulating program
frec(1M)        - recover files from a backup tape
mtio(7)         - interface conventions for magnetic tape devices
tc(7)           - Apple Tape Backup 40SC device driver
% 
```

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

For more information

To find out where you need to go for more information about how to use A/UX, see *Road Map to A/UX*. This guide contains descriptions of each A/UX guide and ordering information for all the guides in the A/UX documentation suite.

Commands by Function

This section lists all A/UX commands categorized by the functions they perform. The major functional categories appear in bold type. These major categories begin on the pages shown following:

Each category includes one or more subcategories. While the category appears in bold text, the subcategory appears in plain text. Under each subcategory are the related functions.

To find a command that can count words in a file, you might follow this sequence of actions:

1. Locate ''Processing Structured or Unstructured Text'' (page 18) as the most appropriate main category.
2. Turn to page 18 and browse through the pages following 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.
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*. An even faster way to

locate information is to use the online help provisions of A/UX. (See "Using the Online Documentation" in the preface.)

Normally, the names of manual page subdocuments are the same as the names of the commands they describe. This is not true when a manual page subdocument describes more than one command. An example is `rmdir`, which is described on the `rm`(1) manual page. You can use the `whatis` command to help you locate the actual manual page for more information about a given command. Another way to locate the `rm`(1) manual page for commands like `rmdir` is to enter `rmdir` as the argument to the `man` command. The `man` command automatically locates the `rm`(1) 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.

The uses of some commands fit several categories. For example, the command fits equally well within two categories, "Performing Arithmetic Calculations" and "Interpreting Command Lines." To make the summary brief, however, each command is listed under only one classification. Note also that rarely-used commands are interspersed among frequently-used commands, falsely suggesting that each command is equally useful.

Also, the manual pages cited for a specific category may not provide an adequate overview of a given topic. For example, the cited commands for "Directing Data To and From Files," `tee` and `cat`, do not provide adequate guidance about input and output redirection. Redirection is best described in other A/UX books, such as *A/UX Shells and Shell Programming*. (The following manual pages from the *A/UX Command Reference* also describe input and output redirection: `sh`(1), `csh`(1), and `ksh`(1).)

Finally, 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. The chief concern for the choice of category titles was finding titles that are clear when considered with the other categories. Accordingly, the category titles taken by themselves often fail to describe precise sets of commands.

If you are confident using Macintosh applications but uncertain about the added value that A/UX can provide, 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 managing large numbers of folders and files,

A/UX command lines may be preferable to Finder operations. For example, command lines can be used to manipulate files in a nested folder without having to use a prior operation to "open" the nested folder.

Controlling How Commands Are Run. Among the commands listed are those that allow you to schedule commands to run in a recurring fashion, 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 Structured or Unstructured Text. The editors are frequently used to edit database style tables, such as `/etc/passwd`, as well as to edit document text. `TextEditor` is the editor of choice if you wish to take advantage of your Macintosh skills. 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 to automate recurring tasks or to bind several related actions into an easily-invoked command script. The shells allow users to easily create new A/UX functions, extending the repertoire of existing programs in ways that fit the needs of a particular site. A number of the supplied A/UX programs are actually shell scripts, so they can be readily copied and customized.

Accessing the system and its help resources

Finding out about your network

displays a list of the active users from all of the systems on the local network ..... `rwho`

displays the host status of local machines ..... `ruptime`

produces a login list for local machines (RPC version) ..... `rusers`

Finding out about your system

displays a summary of the current system activity ..... `w`

displays group memberships ..... `groups`

displays identification information about the current system ..... `uname`

displays information about the users on a system ..... `finger`

displays login and logout times for each user of the system ..... `last`

displays the system page size ..... `pagesize`

displays user and group IDs and names ..... `id`

provide truth values about processor type ..... `machid`

reports a list of the users who are logged on to the system ..... `users`

reports how long system has been up ..... `uptime`

Finding out about your session

displays the value of variables set in the current environment ..... `printenv`

gets the login name ..... `logname`

obtains the device filename for the terminal or CommandShell window where it is invoked ..... `tty`

prints the name of the working directory ..... `pwd`

reports process status ..... `ps`

Getting online help

displays the named manual page entries ..... `man`
informs you of the current system activity ..... `whodo`
locates commands by keyword ..... `apropos`
prints effective current user ID ..... `whoami`
reports a brief description for the manual page entry specified .... `whatis`
reports the directory path to a file by interpreting PATH and alias settings ..... `which`
reports the locations of the source, binary, and online help files for a specified command ..... `whereis`
reports users who are currently logged in to the system ..... `who`

Logging in and logging out

changes the login password ..... `passwd`
logs in to a remote system ..... `rlogin`
logs you into a new group ..... `newgrp`
signs you on a terminal session ..... `login`

Performing arithmetic calculations

desk calculator ..... `dc`
prints the prime factor of a given number ..... `factor`
processes an arbitrary-precision arithmetic language ..... `bc`
rescales quantities according to a the unit of measure specified ..... `units`

Using devices

blocks data to 8K for direct input to `/dev/rmt/tc`*x* ..... `tcb`
clears the terminal screen ..... `clear`
ejects a diskette from the drive ..... `eject`
manipulates magnetic tape media ..... `mt`
prepares data to be printed on the Apple ImageWriter II printer ..... `iw2`
sets the modes for a terminal ..... `stty`
sets the tab stops on a terminal ..... `tabs`

Using time and date utilities

displays a calendar ..... cal
displays and sets the date ..... date
provides a reminder service ..... calendar
reminds you when you have to leave ..... leave

Managing files and directories

Changing file attributes

change the owner or group of a file ..... chgrp
change the owner or group of a file ..... chown
changes the permissions of a file ..... chmod
sets attributes for Macintosh files, such as file type and creator ..... setfile
updates access and modification times of a file ..... touch

Comparing files and directories

compares the contents of two directories ..... dircmp
compares the difference between two large files that are too big for diff to handle ..... bdiff
compares three versions of a file diff3
compares two files or directories for any differences ..... diff
compares two files ..... cmp
merges three files into one ..... merge
reports differences between two files or directories ..... ucbdiff
reports side-by-side differences between two files in a side-by-side format ..... sdiff
reports the differences between three files ucbdiff3
sums and counts the characters within the files of the given directories ..... sumdir

Compressing and encrypting files

Copying files and directories

converts a file in one storage format to a different storage format ... `fcnvt`
converts and copies a file ..... `dd`
copies files between two systems ..... `rcp`
copies files to or from a `cpio` archive ..... `cpio`
copies files to or from a `tar` archive ..... `tar`
copies files to or from a `tp` archive ..... `tp`
copies files to or from an archive in an IEEE format ..... `pax`
copies files ..... `cp`
makes links ..... `ln`
splits a file into a specified number of pieces ..... `split`
splits files into sections ..... `csplit`

Creating, renaming, and removing files and directories

creates a directory ..... `mkdir`
moves or renames files ..... `mv`
remove files or directories ..... `rm`
remove files or directories ..... `rmdir`

Directing data to and from files

catenates and displays the contents of files ..... `cat`
transcribes data ..... `tee`

Displaying filenames and file status

calculates a checksum ..... `sum`
determines the type of a file ..... `file`
lists the contents of a directory ..... `ls`
reports version number of files ..... `version`

Finding files

finds files ..... `find`

Finding out about your file system

reports the used and unused storage capacity for a file system ..... `df`

summarizes disk usage ..... `du`

Looking at files

displays the first few lines of a file ..... `head`

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

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

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

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

Printing files

cancels print requests spooled through the `lp` command ..... `cancel`

queries the print spooler for progress information ..... `lpq`

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

spools print requests to printers ..... `lp`

spools print requests to printers ..... `lpr`

Controlling the user interface

Choosing session preferences

changes the default login shell ..... `chsh`

logs you in to A/UX by using a graphical user interface ..... `Login`

manages command-interpretation windows and moderates access to the A/UX console window ..... `CommandShell`

Customizing the Macintosh system for one user account

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

Interpreting command lines

discontinues a `csh` login session (a function built into `ksh`) ..... `logout`

discontinues command interpretation in the current shell (as a function built into the shell) ..... `exit`

evaluates its arguments as a command line a specified number of times (as a function built into the shell) ..... `repeat`

evaluates its arguments as a command line and then exits shell (a function built-into the shell) ..... `exec`

evaluates its arguments as a command line as a function built into the shell ..... `eval`

manages the layering of multiple shells ..... `shl`

runs the Bourne shell ..... `sh`

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

runs the Korn shell, an enhanced command interpreter that is backward-compatible with the Bourne shell (`sh`) ..... `ksh`

Launching Macintosh applications

runs a Macintosh binary application in A/UX ..... `launch`

Controlling how commands are run

Delaying a command or part of a shell script

suspends the system for a specified interval of time ..... `sleep`

Establishing the environment for a Macintosh application

changes or displays the fields of the 'SIZE' resource of a file ..... `changesize`

convert between Macintosh encoding and International Standards Organization (ISO) encoding ..... `isotomac`

convert between Macintosh encoding and International Standards Organization (ISO) encoding ..... `mactoiso`

Establishing the execution environment for a command

..... `ulimit`

changes the current working directory as a function built into the shell ..... `cd`

changes the root directory for a command ..... `chroot`

displays or resets default file permissions as a function built into the shell ..... `umask`

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

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

invokes to a shell on a remote system ..... `remsh`

runs a command so that it can continue to run even after your session has ended ..... `nohup`

sets the environment for command execution ..... `env`

Interpreting command lines while maintaining an audit trail

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

Setting a time at which to run a command

aids in the use of the `cron` process scheduling program ..... `crontab`
run commands at a later time ..... `at`
run commands at a later time ..... `batch`
runs the clock daemon ..... `cron`

Managing processes as they run

Signaling and terminating processes

removes interprocess communications facilities ..... `ipcrm`

terminates a process ..... `kill`

Timing the duration of a process

prints the elapsed time during the execution of a command ..... `time`

reports the elapsed, user, and system time during the execution of a command ..... `timex`

Generating command lines

Constructing and executing command lines

builds arguments based on the standard input, passing them in batches to the specified command which is executed enough times to deplete all the arguments ..... `xargs`

passes its arguments in batches to a command that is run once per every batch ..... `apply`

Constructing command lines using Macintosh dialog boxes

builds command lines interactively ..... `cmdo`

Communicating

Communicating with other users

displays local news items ..... news
displays the mail header lines in your mailbox ..... from
enables and disables notification of mail by comsat ..... biff
enables you to send and receive messages electronically ..... mailx
permits or denies the receipt of messages ..... mesg
send mail to users or read mail ..... mail
talks to another user via the terminal ..... talk
writes to all users ..... wall
writes to another user ..... write

Using AppleTalk

allows you to choose a default printer on the AppleTalk internet ..... at_cho_prn
displays status information from an AppleTalk device ..... atstatus
looks up network-visible entities (NVEs) registered on the AppleTalk network system ..... atlookup
transfers data to a printer by using AppleTalk protocols ..... atprint

Using TCP/IP

assigns a serial line to a network interface ..... slip
communicates with another host via the TELNET protocol ..... telnet
displays the status of machines on the local network (RPC version) .... rup
distributes remote files ..... rdist
responds to requests to use the DARPA Trivial File Transfer Protocol ..... tftpd
transfers files by using the DARPA Internet File Transfer Protocol (FTP) ..... ftp
transfers files via the Trivial File Transfer Protocol (TFTP) ..... tftp
writes to all users over a network ..... rwall

Using UUCP

Using other communications tools

Playing games

animates raindrops ..... rain
converts Arabic numerals to English ..... number
generates a maze ..... maze
gives associative knowledge tests on various subjects ..... quiz
play the game of tic-tac-toe ..... cubic
play the game of tic-tac-toe ..... ttt
plays the game of autorobots ..... autorobots
plays the game of backgammon ..... back
plays the game of black jack ..... bj
plays the game of chase ..... chase
plays the game of craps ..... craps
plays the game of cribbage ..... cribbage
plays the game of fortune telling ..... fortune
plays the game of Go Fish'' ..... fish
plays the game of growing worm ..... worm
plays the game of hangman ..... hangman
plays the game of hunt-the-wumpus ..... wump
plays the game of life ..... life
plays the game of Mastermind ..... mastermind
plays the game of moo ..... moo
plays the game of robots ..... robots
plays the game of Space Invaders (A/UX version) ..... aliens
plays the game of trek ..... trek
plays the game of twinkle, twinkle little stars ..... twinkle
plays the game of worms ..... worms
provides arithmetic problems ..... arithmetic
simulates a punched card corresponding to a text argument ..... bcd

Processing text as records within a database

Processing sorted text records

Processing text records and fields

Processing structured or unstructured text

Editing text

Generating custom text transformations

Printing poster-size text

Processing tabbed text

Reporting occurrences of words or letters

Processing text to produce printed documents

Filtering printer motions from text for display purposes

Formatting text into pages for printing

Preparing text with `troff` markup

analyzes the surface characteristics of documents ..... `style`
builds an inverted index for a bibliography ..... `indxbib`
creates a subject-page index for a document ..... `ndx`
creates or extends a bibliographic database ..... `addbib`
find spelling errors ..... `hashcheck`
find spelling errors ..... `hashmake`
find spelling errors ..... `spell`
find spelling errors ..... `spellin`
finds and inserts literature references in documents ..... `refer`
generates a list of subjects from documents ..... `subj`
generates a permuted index ..... `ptx`
locate wordy sentences in a document ..... `diction`
locate wordy sentences in a document ..... `explain`
sorts bibliographic database ..... `sortbib`

Preprocessing subsidiary markup within `troff` markup

eliminates the source commands from `nroff` input ..... `soelim`
folds long lines for finite-width output device ..... `fold`
format mathematical text for `troff` ..... `eqn`
formats mathematical text for `nroff` ..... `neqn`
invokes a simple text formatter ..... `fmt`
invokes a `pic` preprocessor for drawing graphs ..... `grap`
prepare constant-width text for `otroff` ..... `cw`
preprocesses `troff` files that contain drawings ..... `pic`
processes a file through a line numbering filter ..... `nl`
produces single spaced output ..... `ssp`
table formatter for `nroff` or `troff` ..... `tbl`

Processing troff-related markups for special purposes

Setting up device-specific fonts for use with troff

Processing plotter drawings

Filtering plotter input for display purposes

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

Processing graphics

draws a graph ..... `graph`

interpolates a smooth curve ..... `spline`

Writing shell programs

Evaluating expresssions to provide true or false results

evaluates conditions ..... `test`
provides truth values ..... `false`
provides truth values ..... `true`

Evaluating math or string expressions

echoes its arguments ..... `echo`
evaluates arguments as an expression ..... `expr`
get part of a pathname ..... `basename`
get part of a pathname ..... `dirname`
parses command options ..... `getopt`
reverses characters within each line of text ..... `rev`

Performing input or output operatations

posts a Macintosh alert box to query the user ..... `macquery`
prints its arguments as a function built into the Korn (`ksh`) shell ..... `print`
queries the user for input ..... `query`
queries `terminfo` database ..... `tput`
reads one line from the standard input ..... `line`

Programming

Using Macintosh development tools

compiles Macintosh resource files from source code ..... `rez`
decompiles a resource file ..... `derez`

Using other programming tools

assembles files by translating assembler mnemonics to object code ..... `as`
compiles and interprets `bs` programs ..... `bs`
compiles compilers (yet another compiler-compiler) ..... `yacc`
compiles regular expressions with a file ..... `regcmp`
converts an object file to Motorola S-record format ..... `hex`
converts binary data to a displayable form in octal, decimal, hexadecimal, or ASCII ..... `od`
creates a shared library ..... `mkshlib`
debugs and executes programs ..... `dbx`
debugs executable programs ..... `adb`
displays profile data ..... `prof`
displays section sizes of common object files ..... `size`
displays the symbol table of a common object file ..... `nm`
finds the ordering relation for an object library ..... `lorder`
finds the printable strings in an object or other binary file ..... `strings`
generates C source code from a remote procedure call (RPC) source file ..... `rpcgen`
generates programs for simple lexical tasks ..... `lex`
invokes the link editor for common object files ..... `ld`
maintains a library of files in an archive ..... `ar`
maintains, updates, and regenerates groups of files ..... `make`
produces an assembly language listing for a specified file ..... `dis`
receives and converts Motorola S-records from a port to a file ..... `rcvhex`
sorts lines in a file topologically ..... `tsort`
stores (saves) selected parts of an object file ..... `dump`
strips symbol and line number information from an object file ..... `strip`
swaps bytes in COFF files ..... `conv`
symbolic debugger ..... `sdb`

Using the C language

creates an error message file by massaging C source programs ..... `mkstr`
debugs a C program ..... `ctrace`
generates a C flowgraph ..... `cflow`
generates a C program cross-reference ..... `cxref`
improves spacing and indentation of C source files ..... `cb`
indents and formats C program source ..... `indent`
invokes a C program checker ..... `lint`
invokes the C compiler ..... `cc`
invokes the C language preprocessor ..... `cpp`
maintains a tags file for a C program ..... `ctags`
reports strings from C programs to implement shared strings ..... `xstr`

Using the Fortran language

filters the output of Fortran programs for line printing ..... `fpr`
interprets ASA carriage control characters ..... `asa`
invokes the Extended Fortran Language ..... `efl`
invokes the Fortran 77 compiler ..... `f77`
splits `f77` or `efl` files ..... `fsplit`

Using unusual programming languages

processes macros for C and other languages ..... `m4`
runs the SNOBOL interpreter ..... `sno`

Using version management (RCS)

checks in RCS revisions ci
checks out RCS revisions ..... co
compares RCS revisions ..... rcsdiff
creates new RCS files or changes attributes of existing RCS files ..... rcs
displays log messages and other information about RCS files ..... rlog
displays RCS keywords and their values ..... ident
merges two versions of an RCS file ..... rcsmerge

Using version management (SCCS)

builds an RCS file from an SCCS file ..... sccstorcs
changes the delta commentary of an SCCS delta ..... cdc
combines SCCS deltas ..... comb
compares two versions of an SCCS file ..... sccsdiff
creates and administers SCCS files ..... admin
displays information about an SCCS file ..... prs
displays who has checked a Source Code Control System (SCCS) file out for editing ..... sact
gets a version of an SCCS file ..... get
makes a delta (change) to an SCCS file ..... delta
manipulates version control information inside a data stream vc
performs SCCS subsystem commands ..... sccs
provides help information about SCCS commands and messages ..... help
removes a delta from an SCCS file ..... rmdel
reports identification information for a file ..... what
undoes a previous get of an SCCS file ..... unget
validate SCCS file ..... val

Administering your system

AppleTalk network maintenance

enables you to configure and display AppleTalk network interfaces ..... `appletalk`

exercises the AppleTalk network by sending packets to a named host ..... `appleping`

Backing up your system

copies blocks interactively ..... `bcopy`

copies System V File System-style file systems for optimal access time ..... `dcopy`

copy file systems with label checking ..... `labelit`

copy file systems with label checking ..... `volcopy`

create a `dump.bsd` archive by making copies of files from a given file system ..... `dump.bsd`

create a `dump.bsd` archive by making copies of files from a given file system ..... `rdump`

generates a fast incremental backup for System V file systems ..... `finc`

helps you with autorecovery administration ..... `escher`

recovers files from a backup tape ..... `frec`

retrieve files from within a `dump.bsd` archive into an existing file system ..... `restore`

updates autorecovery files ..... `eu`

updates important files for autorecovery purposes ..... `eupdate`

Examining system status

calls the error-logging daemon ..... `errdemon`

displays kernel name cache statistics ..... `ncstats`

extracts error records from a crash dump ..... `errdead`

prints system facts ..... `pstat`

processes a report of logged errors ..... `errpt`

terminates the error-logging daemon ..... `errstop`

turns on/off the reporting of extended errors ..... `exterr`

File system maintenance

checks file-system consistency and interactively repairs the file system ..... `fsck`
clears inodes ..... `clri`
constructs a file system with 512-byte blocks ..... `mkfs1b`
constructs a System V file system ..... `mkfs`
creates an entry in the file-system table ..... `fsentry`
debugs the file system ..... `fsdb`
displays the current device name ..... `devnm`
identifies processes using a file or file structure ..... `fuser`
installs random inode generation numbers ..... `fsirand`
lists file names and statistics for a System V file system ..... `ff`
locates the filename associated with an i-number ..... `ncheck`
makes a Berkeley 4.2 (UFS) file system ..... `newfs`
makes a directory named `lost+found` to be used by `fsck` ..... `mklost+found`
mount and unmount file systems ..... `mount`
mount and unmount file systems ..... `umount`
reports the file-system type ..... `fstyp`
reports the state of a file system ..... `fsstat`
tunes a Berkeley 4.2 (UFS) file system ..... `tunefs`
updates the superblock ..... `sync`

Installing new software

installs files in specified directories ..... `cpset`
installs A/UX software from specially prepared floppy disks ... `finstall`
places files in specified directories ..... `install`

Kernel generation

creates an up-to-date kernel ..... `autoconfig`
generates an up-to-date kernel ..... `newconfig`
manipulates the files that determine the configuration of a new kernel ..... `newunix`
queries kernel files for configuration information ..... `module_dump`
tunes kernel parameters for work-load optimization ..... `kconfig`

Mail system maintenance

invokes the server for `biff` ..... `comsat`
lists the contents of the mail queue ..... `mailq`
rebuilds the database for the `mail` aliases file..... `newaliases`
sends mail ..... `sendmail`

Monitoring system activity

displays load average statistics ..... `lav`
displays the system status on the status line of a terminal ..... `sysline`
gathers printer/plotter accounting information ..... `pac`
generates a system activity graph..... `sag`
generates disk accounting data by user ID ..... `diskusg`
invoke connect-time accounting ..... `acctcon`
invoke connect-time accounting..... `acctcon1`
invoke connect-time accounting..... `acctcon2`
logs system messages ..... `syslogd`
manipulate connect accounting records ..... `fwtmp`
manipulate connect accounting records ..... `wtmpfix`
merges or adds accounting files ..... `acctmerg`
present an overview of accounting commands ..... `acct`
provide process accounting ..... `acctprc`
provide process accounting ..... `acctprc1`
provide process accounting ..... `acctprc2`
provide shell procedures for accounting ..... `acctsh`
provide shell procedures for accounting ..... `chargefee`
provide shell procedures for accounting..... `ckpacct`
provide shell procedures for accounting ..... `dodisk`
provide shell procedures for accounting ..... `lastlogin`
provide shell procedures for accounting..... `monacct`
provide shell procedures for accounting..... `nulladm`
provide shell procedures for accounting ..... `prctmp`
provide shell procedures for accounting..... `prdaily`
provide shell procedures for accounting..... `prtacct`

provide shell procedures for accounting ..... shutacct
provide shell procedures for accounting ..... turnacct
report system activity sa1
report system activity sa2
report system activity ..... sadc
reports interprocess communication facilities status ..... ipcs
reports system activity ..... sar
runs daily accounting ..... runacct
runs startup programs at boot time ..... startup
searches and formats process accounting files ..... acctcom
summarizes commands from per-process accounting records .... acctcms

Network File System (NFS) network maintenance

displays Network File System (NFS) statistics ..... nfsstat
exports and unexports directories to Network FIle System (NFS) clients ..... exportfs
handle local and remote lock requests ..... lockd
invoke the NFS daemons ..... biod
invoke the NFS daemons ..... nfsd
invokes the Network File System (NFS) mount-request server .... mountd
mounts Network File System (NFS) when needed ..... automount
provide crash and recovery monitoring for network locking services ..... statd
reports RPC information ..... rpcinfo
returns information for the `spray` command ..... sprayd
sets or displays the name of the Network Information Service (NIS) domain ..... domainname
shows all remote mounts ..... showmount
sprays packets ..... spray

Print spooler maintenance

allows `lp` requests ..... `accept`
configures the `lp` spooling system ..... `lpadmin`
controls the operation of the line printer ..... `lpc`
enable or disable LP printers ..... `disable`
enable or disable LP printers ..... `enable`
filter data for the POSTSCRIPT printers ..... `psbanner`
filter data for the POSTSCRIPT printers ..... `pscomm`
filter data for the POSTSCRIPT printers ..... `psinterface`
filter data for the POSTSCRIPT printers ..... `psrv`
filter data for the POSTSCRIPT printers ..... `pstext`
filter data for the POSTSCRIPT printers ..... `transcript`
generates a line-printer ripple pattern ..... `lptest`
prevents LP requests ..... `reject`
prints lp status information ..... `lpstat`
start or stop the `lp` request scheduler and move requests ..... `lpmove`
start or stop the `lp` request scheduler and move requests ..... `lpsched`
start or stop the `lp` request scheduler and move requests ..... `lpshut`
supports the Berkeley print spooler ..... `lpd`

Setting up the system

adds disk blocks to or deletes them from the swap area ..... `swap`
associates named partitions with device files ..... `pname`
changes the current A/UX system node name ..... `chgnod`
checks the installation of boards ..... `checkinstall`
compiles (translates) `terminfo` files ..... `tic`
compiles time-zone information files that are required to set the local time-zone ..... `tzic`
displays the date and time for one or more time zones ..... `tzdump`
formats a disk through a driver-dependent format operation ..... `diskformat`
modify the `/etc/inittab` file in terms of enabling serial ports for use as login terminals ..... `tty_add`
modify the `/etc/inittab` file in terms of enabling serial ports for use as login terminals ..... `tty_kill`

performs disk partitioning ..... dp

pushes streams line disciplines ..... line_sane

set or reset the terminal to a sensible state ..... reset

set or reset the terminal to a sensible state ..... tset

set the initial communication modes, such as speed and line discipline, for the purpose of logging users in to A/UX through serial lines ..... apm_getty

set the initial communication modes, such as speed and line discipline, for the purpose of logging users in to A/UX through serial lines ..... getty

sets or displays the identifier of the current host system ..... hostid

sets or displays the name of the current host system ..... hostname

sets or updates bad block information ..... badblk

sets the characteristics of a serial port ..... setport

sets the keyboard for the console ..... keyset

sets the local time zone ..... settimezone

Starting up and shutting down

displays a progress bar during the A/UX boot sequence ..... StartMonitor

execute system initialization shell scripts ..... bcheckrc

execute system initialization shell scripts ..... brc

execute system initialization shell scripts ..... macsysinitrc

execute system initialization shell scripts ..... powerfail

execute system initialization shell scripts ..... rc

execute system initialization shell scripts ..... sysinitrc

kills all active processes ..... killall

reboots the operating system ..... reboot

runs startup programs at boot time ..... startup

sends messages to StartMonitor, which displays a progress bar during the A/UX boot process ..... startmsg

spawn general processes ..... init

spawn general processes ..... telinit

terminates processes that support multi-user mode and enters single-user mode ..... shutdown

turns off power to the computer ..... powerdown

System administration tools

builds a device file ..... mknod

removes device files from a directory ..... dev_kill

substitutes user ID ..... su

TCP/IP network maintenance

attaches a serial line to a network interface and configures the network interface ..... slattconf

attaches a serial line to a network interface ..... slattach

converts Internet addresses to standard form ..... stdhosts

converts RPC program numbers into DARPA protocol port numbers ..... portmap

creates or updates the Compressed Serial Line/Internet Protocol (CSL/IP) database ..... mkslipuser

displays and modifies the address translation table ..... arp

displays network status information ..... netstat

displays the current state of the Compressed Serial Line/Internet Protocol (CSL/IP) database ..... dslipuser

displays the Ethernet address of each Ethernet card in your system ..... etheraddr

exercises the TCP/IP network by sending Internet Control Message Protocol (ICMP) packets to a named host ..... ping

interactively queries name servers ..... nslookup

invokes a server for kernel statistics ..... rstatd

invokes the network routing daemon ..... routed

invokes the network `rwall` server ..... rwalld

invokes the remote shell server ..... remshd

invokes the remote user communication server ..... talkd

invokes the system status server ..... rwhod

manages network interfaces ..... ifconfig

manipulates the routing tables ..... route

prints a readable description of TCP trace records ..... trpt

provide Internet File Transfer Protocol (FTP) service ..... ftpd
provides Internet domain name service ..... named
runs on a remote system to log you in ..... remlogin
server for remote executions ..... rexecd
server for remote logins ..... rlogind
starts Internet servers when needed ..... inetd
supports the DARPA standard TELNET protocol ..... telnetd
rusers invokes a server for users ..... rusersd

User account maintenance

adds a user account ..... adduser
changes the real-name field of your password file entry for use by finger ..... chfn
check the password/group files ..... grpck
check the password/group files ..... pwck
edits the password file ..... vipw
handles requests from remote systems for user information from finger ..... fingerd

UUCP network maintenance

checks the uucp directories and files ..... uucheck
cleans up files in the uucp spool directory ..... uudemon.cleanup
contacts a remote system with debugging on ..... Uutry
handles remote mail received via UUCP ..... rmail
handles requests from remote systems to run commands ..... uuxqt
handles the transfer of files by uucico over TCP/IP connections ..... uucpd
mails current uucp work status to the uucp administrator ..... uudemon.admin
processes spooled uucp requests ..... uudemon.hour
removes old files from the uucp spool directory ..... uucleanup
schedules uucp file transfers ..... uusched
sets up polling for selected systems ..... uudemon.poll
transfers files as specified by uucp work files ..... uucico

Name Information Server (NIS) maintenance

changes a login password on the Network Information Service (NIS) master server ..... `yppasswd`

displays the host name of a system's Network Information Service (NIS) server ..... `ypwhich`

generates a Network Information Service (NIS) `dbm` file ..... `makedbm`

handle requests to change a password served by the Network Information Service (NIS) ..... `yppasswdd`

initializes Network Information Service (NIS) maps for master and slave servers ..... `ypinit`

lists the contents of a Network Information Service (NIS) map ..... `ypcat`

lists the value of a specified key in a Network Information Service (NIS) map ..... `ypmatch`

propagates changed Network Information Service (NIS) maps .... `yppush`

provide Network Information Service (NIS) service ..... `ypserv`

rebuilds the Network Information Service (NIS) maps ..... `ypmake`

reports the version of a Network Information Service (NIS) map that is on an NIS server ..... `yppoll`

reverses the `netgroup` file ..... `revnetgroup`

sets `ypbind` to a particular domain and Network Information Service (NIS) server ..... `ypset`

transfers a Network Information Service (NIS) map to the local system ..... `ypxfr`

Command Synopses

300

300 [+12] [-*half-line-units*] [-d*tab-delay*, *line-delay*, *char-delay*]
300s [+12] [-*half-line-units*] [-d*tab-delay*, *line-delay*, *char-delay*]

300s

See 300.

4014

4014 [-c*columns*] [-n] [-p*lines*[i] [l [-t] [*file*]

450

450

accept

accept *destinations*

acct

acctdisk
acctdusg [-p *file*] [-u *file*]
accton [*file*]
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

acctcon1 [-l*file*] [-o*file*] [-p] [-t]
acctcon2

acctcon1
See acctcon.

acctcon2
See acctcon.

acctdisk
See acct.

acctdusg
See acct.

acctmerg
acctmerg [-a] [-i] [-p] [-t] [-u] [-v] [*file*]...

accton
See acct.

acctprc
acctprc1 [ctmp]
acctprc2

acctprc1
See acctprc.

acctprc2
See acctprc.

acctsh
chargefee *login-name number*
ckpacct [*amt*]
dodisk [-o] [*filesys*]...
lastlogin
monacct *month*
nulladm *name*
prctmp [*recfile*]...
prdaily [-l] [-c] [*mmdd*]
prtacct *file* [*heading*]
shutacct [*reason*]
startup
turnacct on| off| switch

acctwtmp

See `acct`.

adb

`adb` [`-k`] [`-w`] [*object-file* [*core-file*]]

addbib

`addbib` [`-a`] [`-p` *prompt-file*] *database*

adduser

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

admin

`admin` [`-a`*name-or-gid*] [`-d`*option*[*value*]] [`-e`*name-or-gid*] [`-f`*option*[*value*]] [`-h`] [`-i`[*name*]] [`-m`[*mrlist*]] [`-n`] [`-r`*release*[.*level*]] [`-t`[*descriptive-text*]] [`-y`[*comment*]] [`-z`] *file*...

ae

aliens

`aliens`

apm_getty

See `getty`.

appleping

`appleping` *net-node* [*packet-size* [*npackets*]]
`appleping` *name*:*type*[`@`*zone*] [*packet-size* [*npackets*]]

appletalk

`appletalk` [`-b` *hardware-interface*] [`-c`] [`-d`] [`-i` *interface*] [`-n`] [`-p`] [`-s`] [`-u`] [`-z`]

apply

`apply` [`-a`*esc-char*] [`-`*args-per-batch*] *command argument*...

apropos

`apropos` *search-string*...

ar

ar -dp [l] [v] *archive file...*
ar -mp [l] [v] [*position archivefile*] *archive file...*
ar -qp [c] [l] [v] *archive file...*
ar -rp [c] [l] [u] [v] [*position archivefile*] *archive file...*
ar -tp [s] [v] *archive file...*
ar -xp [l] [s] [v] *archive file...*

arithmetic

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

arp

arp *host*
arp -a [*kernel*] [*memory-interface*]
arp -d *host*
arp -f *file*
arp -s *host ethernet-address* [*status*]

arp

as

as [-A *factor*] [-m] [-n] [-o *object-file*] [-R] [-V]
[-68030] [-68040] [-68851] *file*

asa

asa [*file*]...

ascii

cat /usr/pub/ascii

at

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

atlookup

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

atprint

atprint [*printer-name*[: *printer-type*[@*zone*]]]

atstatus

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

at_cho_prn

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

autoconfig

autoconfig [-a] [-b *module-directory*] [-d *init-scripts-directory*]
[-i *base-kernel*] [-I] [-k] [-l *linker*] [-L *loadfile*]
[-m *master-directory*] [-M *master-file*] [-o *kernel-file*]
[-s *startup-scripts-directory*] [-S *script*] [-t *timeout*] [-v] [-V]
autoconfig -D [-i *base-kernel*] [-v] [-V]
autoconfig -c [-v] [-V]

automount

automount [-D *environment-variable=value*] [-f *master-file*] [-m]
[-M *mount-directory*] [-n] [-tl *duration*] [-tm *interval*]
[-tw *interval*] [-T] [-v] [*directory map* [*-mount-options*]]...

autorobots

autorobots

awk

awk [-F*field-separator*] *'pattern-action...'* [[-v] *variable=value*]...
[*file*]...
awk [-f *awk-source-file*] [-F*field-separator*] [[-v] *variable=value*]...
[*file*]...

back

back

badblk

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

banner

banner *string...*

banner7

banner7 [-w [*width*]] [*text*]

basename

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

batch
See `at`.

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

bcd
`bcd` *text*

bcheckrc
See `brc`.

bcopy
`bcopy`

bdiff
`bdiff` *file1 file2* [*lines-per-segment*] [`-s`]

bfs
`bfs` [`-`] *file*

biff
`biff` [*switch*]

biod
See `nfsd`.

bj
`bj`

brc
`brc`
`bcheckrc`
`macsysinitrc`
`powerfail`
`rc`
`sysinitrc`

bs
`bs` [*file* [*argument*]...]

cal
`cal` [[*month*] *year*]

calendar

calendar [-]

cancel

cancel [*printer*]
cancel [*id*]...

cat

cat [-] [-e] [-s] [-t] [-u] [-v [*file*]...

cb

cb [-j] [-l *line-length*] [*file*]...
cb [-j] [-s] [*file*]...

cc

cc [-A *factor*] [-a] [-B *string*] [-c] [-C] [-D*symbol*[=*def*]] [-E]
[-fm68881] [-F] [-g] [-I*dir*] [-l*x*] [-L *dir*] [-n] [-o *outfile*] [-O]
[-p] [-P] [-R] [-s] [-S] [-t [*p012al*]] [-T] [-U*symbol*] [-v]
[-W *c*, *arg1*[, *arg2*]... [-X] [-y] [-Z*flags*] [-68030] [-68040]
[-68851] [-#]... *file*...

ccat

See compact.

cdc

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

cflow

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

changesize

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

chargefee

See acctsh.

chase

chase [*nrobots*] [*nfences*]

checkcw

See cw.

checkeq
See eqn.

checkinstall
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 [*login-name*]

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

chgrp
See chown.

chmod
chmod *mode file...*

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

chroot
chroot *newroot command*

chsh
chsh *name* [*shell*]

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

ckpacct

See `acctsh`.

clear

`clear`

clri

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

cmdo

`cmdo` *command*
`cmdo -o` *resfile* `[-n] [-s]` *command*

cmp

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

co

`co` [`-d`*date*] [`-j`*joinlist*] [`-l`[*rev*]] [`-p`[*rev*]] [`-q`[*rev*]] [`-r`[*rev*]] [`-s`*state*] [`-w`[*login*]] *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` [`-` [`1`] [`2`] [`3`]] *file1 file2*

CommandShell

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

compact

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

compress

compress [-b *maxbits*] [-c] [-f] [-v] [-V] [*file*]...
compressdir [*compress-flag*]... [*directory*]...
uncompressdir [*uncompress-flag*]... [*directory*]...
uncompress [-c] [-f] [-v] [-V] [*file*]...
zcat [-V] [*file*]...
zcmp [*cmp-option*]... *file1* [*file2*]
zdiff [*diff-option*]... *file1* [*file2*]
zmore [*file*]...

compressdir

See compress.

comsat

comsat

conv

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

cp

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

cpio

cpio -o [a] [c] [B] [F] [v]
cpio -i [6] [b] [B] [c] [d] [f] [m] [r] [s] [S] [t] [u] [v] [*patterns*]
cpio -p [a] [d] [l] [m] [u] [v] *directory*

cpp

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

cpset

cpset [-o] [-O] *file directory* [*mode* [*owner* [*group*]]]

craps

craps

cribbage

cribbage [-e] [-q] [-r] *name...*

cron

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 [-c*device-type*] [-h] [-l*device-name*] [-s*baud-rate*] [-v]
[-w*time-limit*] [-x*debug-level*] *telephone-number* ...

ctags

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

ctrace

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

cu

cu [-b*bits*] [-dhint] [-e] [-c*device-type*] [-o] [-s*baud-rate*]
[-x*debug-level*] -l*device-name*
cu [-b*bits*] [-dhint] [-e] [-c*device-type*] [-l*device-name*] [-o]
[-s*baud-rate*] [-x*debug-level*] *telephone-number*
cu [-b*bits*] [-dhint] [-e] [-c*device-type*] [-l*device-name*] [-o]
[-s*baud-rate*] [-x*debug-level*] *system*

cubic

See ttt.

cut

cut -c*list* [-s] [*file*]...
cut -f*list* [-d *char*] [-s] [*file*]...

cw

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

cxref

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

daps

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

date

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

dbx

dbx [-c *file*] [-D] [-i] [-I *dir*]... [-r] [*objfile* [*coredump*]]

dc

dc [*file*]

dcopy

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

dd

dd [bs=*n*] [cbs=*n*] [conv=ascii] [conv=ebcdic] [conv=ibm] [conv=lcase] [conv=noerror] [conv=swab] [conv=sync] [conv=*type*,*type*] [conv=ucase] [count=*n*] [ibs=*n*] [if=*file*] [multi=in] [multi=in,out] [multi=out] [of=*file*] [obs=*n*] [seek=*n*] [skip=*n*]

delta

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

derez

derez [-c] [-d*macro-assignment*]... [-e] [-i*include-dir*]... [-m*string-size*] [-p] [-rd] [-u*macro*]... *resource-file* [*resource-description-file*]...
derez [-c] -o*scope* [-d*macro-assignment*]... [-e] [-i*include-dir*]... [-m*string-size*] [-p] [-rd] [-u*macro*]... *resource-file* [*resource-description-file*]...
derez [-c] -s*omit-scope* [-d*macro-assignment*]... [-e] [-i*include-dir*]... [-m*string-size*] [-p] [-rd] [-u*macro*]... *resource-file* [*resource-description-file*]...

deroff

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

devnm

devnm [*mount-point*]

dev_kill

dev_kill *number directory...*

df

df -t [-f] [-T *fs-type*] [*fs-reference*]...
df -B [-i] [-T *fs-type*] [*fs-reference*]...
df -p [-i] [-T *fs-type*] [*fs-reference*]...

diction

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

diff

diff [-b] [-c] [-e] [-f] [-h] [-l] [-r] [-s] [-S*name*] *dir1 dir2*
diff [-b] [-c] [-e] [-f] [-h] *file1 file2*
diff [-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 [-cyl *start*[-[*end*]]] [-dens *n*] [-head 0] *floppy-device*
diskformat [-size 532] *hard-disk-device*

diskusg

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

dodisk

See acctsh.

domainname

domainname [*domain-name*]

dp

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

dslipuser

dslipuser

du

du [-a[l]] [-r] [-s] [*files*]

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

dump.bsd

dump.bsd [T*fstype*] [*dumplev*] [b] [d] [f] [n] [s] [u] [*bdfs-arg*]...
fs-reference

dump.bsd [T*fstype*] [*dumplev*] c [d] [f] [n] [s] [u] [*dfs-arg*]... *fs-reference*

dump.bsd [T*fstype*] [*dumplev*] F [d] [f] [n] [s] [u] [*dfs-arg*]... *floppydev*

dump.bsd [T*fstype*] w

dump.bsd [T*fstype*] W

rdump [T*fstype*] [*dumplev*] [b] [d] [f] [n] [s] [u] [*bdfs-arg*]...
host:*fs-reference*

rdump [T*fstype*] [*dumplev*] c [d] [f] [n] [s] [u] [*dfs-arg*]... *host*:*fs-reference*

rdump [T*fstype*] [*dumplev*] F [d] [f] [n] [s] [u] [*dfs-arg*]... *host*:*fs-reference*

rdump [T*fstype*] w

rdump [T*fstype*] W

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 [-1] [-2] [-b*header*] [-B] [-f*font*] [-F*hfont*] [-g] [-G] [-h] [-k] [-K] [-l] [-L*lines*] [-m] [-o] [-p*out*] [-q] [-r] [-R] [[-#*n*] [-C*class*] [-J*name*] [-P*printer*]] [*files*]
enscript [-1] [-2] [-b*header*] [-B] [-f*font*] [-F*hfont*] [-g] [-G] [-h] [-k] [-K] [-l] [-L*lines*] [-m] [-o] [-p*out*] [-q] [-r] [-R] [[-d*dest*] [-n*n*] [-t*title*] [-w] [*files*]

env

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

environ

extern char **environ;

eqn

eqn [-d*xy*] [-f*n*] [-p*n*] [-s*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

errdemon [*file*]

errpt

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

errstop

errstop [*namelist*]

esch

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

escher

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

etheraddr

etheraddr [*slot*]

eu

eu *file*

eupdate

eupdate

ex

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

expand

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

explain

See diction.

exportfs

exportfs
exportfs -a [-i] [-v] [-o *export-options*] [-u] [*directory-or-file*]...
exportfs -u [-v] *directory-or-file...*

expr

expr *arguments*

exterr

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

f77

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

factor

factor [*number*]

false

See true.

fcntl

#include <fcntl.h>

fcnvt

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

ff

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

fgrep

See grep.

file

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

finc

finc [-a *n*] [-c *n*] [-m *n*] [-n *file*] *disk-device-file device-file*

find

find *pathname... expression*

finger

finger [f] [w] [*login-or-real-name*]...
finger -i [f] [w] [*login-name*]...
finger -q [f] [w] [*login-name*]...
finger -l [b] [h] [m] [p] [*login-or-real-name*]...
finger [-l] *login-or-real-name@host* [*login-or-real-name@host*]...
finger [-s] *@host* [*@host*]...

fingerd

in.fingerd

finstall

finstall

fish

fish

fmt

fmt [*file*]...

fold

fold [*-width*] [*file*]...

font

troff -T*tty-type* ...

fortune

fortune

fpr

fpr

frec

frec [-f*reqfile inumber*:*name*...] [-p*path*] *device-file*

freq

freq [*file*]...

from

from [-s *sender*] [*user*]

fsck

fsck -T*fs-type* [-y] [-n] [-m *timeout*] [-s *interleave*] [-S *interleave*] [-t *file*] [-q] [-D *option*]... [-f] [-p *passtostart*] [*svfs-filesystem*]...
fsck -T*fs-type* [-b *block-number*] [-y] [-n] [-m *timeout*] [-p *passtostart*] [*ufs-filesystem*]...

fsdb

fsdb [-?] [-o] [-p*string*] [-T4.2] [-w] *UFS-symbol*...
fsdb [-] [-T5.2] *SVFS-symbol*...

fsentry

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

fsirand

fsirand [-p] [-T*fs-type*] *special*

fsplit

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

fsstat

fsstat [-T*fs-type*] *fs-device-file*

fstyp

fstyp *file*

ftp

ftp [-d] [-g] [-i] [-n] [-v] [*remote-system*]

ftpd

ftpd [-d] [-l] [-t*timeout*]

fuser

fuser [-] [-k] [-n*namelist*] [-u] *file...*

fwtmp

fwtmp [*-ic*]
wtmpfix [*file*]...

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

getty [-C *string*] [-d] [-h] [-i] [-q] [-t *timeout*] *line* [*gettydefs-label* [*type* [*linedisc*]]]
getty -c *file*

apm_getty [-h] [-t *timeout*] *line* [*gettydefs-label* [*type* [*linedisc*]]]

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

greek -T*terminal*[</usr/pub/greek]

grep

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

groups

groups [*user*]

grpck

See pwck.

hangman

hangman [*dictionary*]

hashcheck

See spell.

hashmake

See spell.

head

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

help

help [*args*]...

hex

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

hostid

hostid [*identifier*]

hostname

hostname [*nameofhost*]

hyphen

hyphen [*file*]...

icmp

None; included automatically with inet(5F).

id

id

ident

ident *file*...

ifconfig

ifconfig *interface* [*address*[*dest-address*]] [*option*]...
ifconfig *interface* [*address-family*]

in.fingerd

See fingerd.

in.ftpd

See ftpd.

in.tftpd

See tftpd.

indent

indent *input* [*output*] [-bc,-nbc] [-br,-bl] [-c*n*] [-cd*n*] [[-dj],-ndj] [-d*n*] [-i*n*] [-l*n*] [-v,-nv]

indxbib

indxbib [*database*]... [*file*]...

inet

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

inetd

inetd [-d]

init

init [*run-level* [*directive*]]

install

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

join

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

kconfig

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

kermit

kermit [-a *fn1*] [-b *n*] [-c] [-d] [-f] [-g *rfn*] [-h] [-i] [-k] [-l *dev* [-n]] [-p *x*] [-q] [-r] [-s *fn*] [-t] [-w] [-x] [*file*]...

keyset

keyset [-c *country*] [-k *keyboard*]

kill

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

killall

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

ksh

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

labelit

See volcopy.

last

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

lastlogin

See acctsh.

launch

launch [-adr] *application* [*document*]...
launch -p [*adr*] *application document*...

launch

launch -a [-d] [-e] [-f] [-k *value*] [-m] [-p *swapdev-spec*] [-r] [-v] [-S] [-s] [*path*]

launch -n [-d] [-e] [-f] [-k *value*] [-m] [-p *swapdev-spec*] [-r] [-v] [-s] [-S] [*path*]

lav

lav

ld

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

leave

leave [*hhmm*]

lex

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

life

life [-r]

line

line *input*

line_sane

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] *file1* [*file2*]
ln *file... directory*
ln -f *directory1 directory2*

lo

pseudo-device loop

lockd

See rpc.lockd.

login

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

Login

Login [*startmac-options*] [-- [-g] [-r]]

logname

logname

lookbib

lookbib [-n] *database*

lorder

lorder *file...*

lp

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

lpadmin

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

lpc

lpc [*command* [*argument]...]*

lpd

lpd [-l] [*alt-internet-no*]

lpmove

See lpsched.

lpq

lpq [+[*sleep-interval*]] [-l] [-P*printer*] [*jobno*]... [*user*]...

lpr

lpr [-# *copies*] [-C *class*] [-h] [-i [*indent-cols*]] [-J *cover-title*] [-l]
[-m] [-p] [-P *printer*] [-r] [-s] [-T *title*] [-w*page-width*] [*file*]...

lprm

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

lpsched

lpsched
lpshut
lpmove *requests dest*
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 [-a] [-b] [-c] [-C] [-d] [-F] [-g] [-i] [-l] [-L] [-m] [-n] [-o] [-p] [-q] [-r] [-R] [-s] [-t] [-u] [-x] [*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 [-a] [-c] [-n] [-s] [-t*timeout*] *resource-file alert-id* [*parm1* ... *parm4*]

macref

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

macsysinitrc

See brc.

mactoiso

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

mail

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

makedbm

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

makedev

makedev *files*

makekey

makekey

man

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

man

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

mastermind

mastermind

math

#include <math.h>

maze

maze

me

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

merge

merge [-p] *file1 file2 file3*

mesg

mesg [*choice*]

mkdir

mkdir *dirname...*

mkfs

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

mkfs1b

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

mklost+found

mklost+found

mknod

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

mkshlib

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

mkslipuser

mkslipuser

mkstr

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

mm

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

mm

mm [options] [files]
nroff -mm [options] [files]
nroff -cm [options] [files]
mmt [options] [files]
troff -mm [options] [files]

mmt

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

module_dump

module_dump *kernel-file*

monacct

See acctsh.

moo

moo

more

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

mount

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

mountd

rpc.mountd [-n]

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

See mmt.

named

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

ncheck

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*] [-f*n*] [-p*n*] [-s*n*] [-] [*file*]...

netstat

netstat [-a] [-A] [-n] [-f *address-family*] [*kernel*] [*memory-interface*]
netstat [-h] [-i] [-m] [-n] [-r] [-s] [-f *address-family*] [*kernel*] [*memory-interface*]
netstat [-I *interface*] *interval* [*kernel*] [*memory-interface*]
netstat -I *interface* [-n] [*kernel*] [*memory-interface*]

newaliases

newaliases

newconfig

newconfig [-k] [*module*]... [no*module*]... [nonet] [-v]

newform

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

newfs

newfs [-b *block-size*] [-c *cylinders-per-group*] [-f *fragment-size*] [-i *bytes-per-inode*] [-m *free-space*] [-r *revolutions-per-minute*] [-s *size*] [-t *tracks-per-cylinder*] [-v] *device-file type*

newgrp

newgrp [-] [*group*]

news

news [-a] [-n] [-s] [*items*]

newunix

newunix [[no]*module*]...

nfsd

nfsd [*nserver*]...
biod [*nserver*]...

nfsstat

nfsstat [-c] [-n] [-r] [-s] [-z]

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-line* &

nroff

nroff [-e] [-h] [-i] [-m*name*] [-n*start-no*] [-o*page-range*] [-q] [-r*letter*[*value*]] [-s[*pages-per-pause*]] [-T*tty-type*] [-u[*boldening-amt*]] [-z] [*file*]...

nslookup

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

nterm

nulladm

See acctsh.

number

number

od

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

otroff

otroff [-c*name*] [-b] [-f] [-k*name*] [-m*name*] [-p*point-size*] [-t] [-w] [*file*]...

pac

pac [-c] [-m] [-p*price*] [-P*printer*] [-r] [-s] [*name*]...

pack

pack [-] [-f] *file*...
pcat *file*...
unpack *file*...

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*] [*path*]...
pax -rw [-ilmopuvy] [-s *replstr*] [*path*]... *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

ping [-d] [-r] [-v] *host* [*packet-size*] [*npackets*]

pname

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

portmap

portmap

powerdown

powerdown

powerfail

See brc.

pr

pr [+*pageno*] [-*columns*] [-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] [*objfile*]

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

psbanner

See transcript.

pscomm

See transcript.

psdit

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

psinterface

See transcript.

psroff

psroff [-t] [[-a] [-i] [-m*name*] [-n*N*] [-o*list*] [-q] [-r*aN*] [-s*N*] [-T*dest*]] [[-d*dest*] [-C *class*] [-J *name*] [-h] [-n*x*] [-P *printer*] [-r] [-s] [-m] [-w]] [*file*]...

psrv

See transcript.

pstat

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

pstext

See transcript.

ptx

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

pwck

pwck [*file*]
grpck [*file*]

pwd

pwd

query

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

quiz

quiz [-i*file*] [-t] [*category1 category2*]

rain

rain

rc

See brc.

rcp

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

rcs

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

rcsdiff

rcsdiff [-b] [-c] [-e] [-f] [-h] [-i] [-n] [-t] [-w] [-r*rev1*] [-r*rev2*] *file ...*

rcsintro

rcsmerge

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

rcvhex

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

rdist

rdist [-b] [-d*var=value*] [-f*distfile*] [-h] [-i] [-m*host*] [-n] [-q] [-R] [-v] [-w] [-y] [*name*]...
rdist [-b] -c *name...* [-h] [-i] [-n] [-q] [-R] [-v] [-w] [-y] [*login@*] *host* [:*dest*]

rdump

See dump.bsd.

read_disk

read_disk

reboot

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

red

See ed.

refer

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

`reject` [`-r` [*reason*]] [*destination*]...

remlogin

`remlogin -h` *host-name terminal-type*
`remlogin -h` *host-name* `-p`
`remlogin -r` *host-name*

remsh

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

remshd

`in.remshd` *host.port*

reset

See `tset`.

restore

restore i [b] [f] [F] [h] [m] [s] [v] [y] [*bfFs-arg*]...

restore r [b] [f] [F] [h] [m] [s] [v] [y] [*bfFs-arg*]...

restore R [b] [f] [F] [h] [m] [s] [v] [y] [*bfFs-arg*]...

restore t [b] [f] [F] [h] [m] [s] [v] [y] [*bfFs-arg*]... [*archived-file*]...

restore x [b] [f] [F] [h] [m] [s] [v] [y] [*bfFs-arg*]... [*archived-file*]...

rrestore i [b] [f] [F] [h] [m] [o] [s] [-T*type*] [v] [y] [*bfFs-arg*]...

rrestore r [b] [f] [F] [h] [m] [o] [s] [-T*type*] [v] [y] [*bfFs-arg*]...

rrestore R [b] [f] [F] [h] [m] [o] [s] [-T*type*] [v] [y] [*bfFs-arg*]...

rrestore t [b] [f] [F] [h] [m] [o] [s] [-T*type*] [v] [y] [*bfFs-arg*]...
[*archived-file*]...

rrestore x [b] [f] [F] [h] [m] [o] [s] [-T*type*] [v] [y] [*bfFs-arg*]...
[*archived-file*]...

rev

rev [*file*]...

revnetgroup

revnetgroup [-h] [-u]

rexecd

in.rexecd *host*.*port*

rez

rez [-a] [-align *word-type*] [-c *reator*] [-d *macro-assignment*]...
[-i *include-dir*]... [-o *output-file*] [-ov] [-p] [-rd] [-ro]
[-s *res-include-dir*]... [-t *type*] [-u *macro*]
[*resource-description-file*]...

rlog

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

rlogin

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

rlogind

in.rlogind *host.port*

rm

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

rmail

rmail [-D*domain-name*] [-T] *login-name ...*

rmdel

rmdel -r *SID* [*file*]...

rmdir

See rm.

robots

robots

roffbib

roffbib [-e] [-h] [-m *name*] [-n*start-no*] [-o*page-range*]
-r*letter*[*integer*] [-s*N*] [-T*tty-type*] [-x] [*file*]...

route

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

routed

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

rpc.lockd

rpc.lockd [-g *grace-period*] [-t *timeout*]

rpc.statd

rpc.statd

rpc.yppasswdd

See yppasswdd.

rpcgen

rpcgen *input-file*
rpcgen -c [-o *output-file*] [*input-file*]
rpcgen -h [-o *output-file*] [*input-file*]
rpcgen -l [-o *output-file*] [*input-file*]
rpcgen -m [-o *output-file*] [*input-file*]
rpcgen -s *transport* [-o *output-file*] [*input-file*]

rpcinfo

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

rrestore

See restore.

rsh

See sh.

rstatd

rpc.rstatd

runacct

runacct [*mmdd* [*state*]]

rup

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

ruptime

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

rusers

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

rusersd

rpc.rusersd

rwall

rwall *hosts*
rwall -n *netgroup*...
rwall -h *host* -n *netgroup*

rwalld

rpc.rwalld

rwho

rwho [-a]

rwhod

in.rwhod

sa1

See sadc.

sa2

See sadc.

sact

sact [-] *file...*

sadc

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

sag

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

sar

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

sccs

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

sccsdiff

sccsdiff -r*delta1* -r*delta2* [-p] [-s*n*] *file...*

sccstorcs

sccstorcs [-t] [-v] *sccsfile ...*

script

script [-a] [*file*]

sdb

sdb [-w] [-W] [*objfile* [*corfile* [*directory*]]]

sdiff

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

sed

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

sendmail

sendmail -bd -bi -bm -bp -bs -bt -bv -bz -C*configuration-file*
-d*debug-level* -F*full-name* -f*name* -h*hop-count* -n
-o*configuration-option value* -q[*interval*] -r*name* -t -v [*address*]...

setfile

setfile [-a*attribute-string*] [-c*creator*]
[-l*horizontal-pixels*, *vertical-pixels*] [-t*type*] [*data-file*]...

setport

setport -o [-s *baud-rate*] *tty*...
setport -r [-s *baud-rate*] *tty*...

settimezone

settimezone

sh

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

shl

shl

showmount

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

shutacct

See acctsh.

shutdown

shutdown [-g*interval*] [-h] [-i*initstate*] [-k] [-n] [-r] [-y] [*timeout* [*warning-message*]]

size

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

slattach

slattach [+c] [-c] [+e] [-e] [+i] [-i] *tty local-name remote-name* [*baud-rate*]

slattconf

slattconf [+c] [-c] [+e] [-e] [+i] [-i] *tty baud-rate client-address cslip-server-address* [*ifconfig-argument*]...

sleep

sleep *time*

slip

slip

sno

sno [*file*]...

soelim

soelim [*file*]...

sort

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

sortbib

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

spell

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

spellin

See spell.

spline

spline [-a] [-k] [-n] [-p] [-x*lower* [*upper*]]

split

split [-] [-*n*] [*file* [*output-file*]...]

spray

spray *host* [-c *count*] [-l *length*]

sprayd

rpc.sprayd

ssp

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

startmac

startmac [-f *findername*] [-m *memsize*] [-o *name*[=*value*]]
[-P *patchfile*] [-s *sysfolder*] [-S *systemfile*]
startmac24 [-f *findername*] [-m *memsize*] [-o *name*[=*value*]]
[-P *patchfile*] [-s *sysfolder*] [-S *systemfile*] [-u *user*] *startup-app*

startmac24

See startmac.

StartMonitor

StartMonitor

startmsg

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

startup

startup

startup

See acctsh.

StartupShell

stat

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

statd
See `rpc.statd`.

stdhosts
`stdhosts` *file*

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

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

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

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

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

subj
`subj` *file...*

sum
`sum` [`-r`] *file...*

sumdir
`sumdir` [*directories*]

swap
`swap -a` [*swapdev* [*swaplow* [*swaplen*]]]
`swap -d` *swapdev* [*swaplow*]
`swap -l`

sync
`sync`

sysinitrc
See `brc`.

sysline

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

syslogd

syslogd [-d] [-f*configfile*] [-m*markinterval*]

systemfolder

systemfolder [-f] [-u *user*]
systemfolder24 [-f] [-u *user*]

systemfolder24

See systemfolder.

tabs

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

tail

tail [±[*number*][[b][f]]] [*file*]
tail [±[*number*][[c][f]]] [*file*]
tail [±[*number*][[l][f]]] [*file*]

talk

talk *user* [*ttyname*]

talkd

in.talkd

tar

tar [-]c[0...7[*density*]][ilvbBdfs] [*bBdfs-arg*]... *file...*
tar [-]r[0...7[*density*]][ilvbBdfs] [*bBdfs-arg*]... *file...*
tar [-]t[0...7][ivw][f *archive*] [*file-in-archive*]...
tar [-]u[0...7[*density*]][ilvbBdfs] [*bBdfs-arg*]... *file...*
tar [-]x[0...7][timovw[f *archive*] [*file-in-archive*]...

tbl

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

tc

tc [-a *n*] [-e] [-o *list*] [-t] [*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*]
telnet

telnetd

in.telnetd

term

test

test [*expr*]

TextEditor

TextEditor [*file*]...

tftp

tftp [*host*]

tftpd

in.tftpd [-d] [-s] [*home-directory*]

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 d[[0...7] [i] [m] [v] [w]] [*file-in-archive*]...
tp r[[0...7] [c] [i] [m] [v] [w]] [*file-in-archive*]...
tp t[[0...7] [i] [m] [v] [w]] [*file-in-archive*]...
tp u[[0...7] [c] [i] [m] [v] [w]] [*file-in-archive*]...
tp x[[0...7] [f] [i] [m] [v] [w]] [*file-in-archive*]...

tplot

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

tput

tput [-T*type*] *capname*

tr

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

transcript

psbanner
pscomm
psinterface
psrv
pstext

trek

trek [[-a] *file*]

troff

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

troff

trpt

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*] [-l] [-m *port*] [-p *type*] [-Q] [-r] [-s] [-S]
reset

tsort

tsort [*file*]

ttt

ttt
cubic

tty

tty [-l] [-s]

tty_add

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

tty_kill

See tty_add.

tunefs

tunefs [-a *maxcontig*] [-d *rotdelay*] [-e *maxbpg*] [-m *free-space*] [-o *optimization*] [-p] *disk-device-file*

turnacct

See acctsh.

twinkle

twinkle [-] [+] [s *file*] [*density1* [*density2*]]

types

#include <sys/types.h>

tzdump

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

tzic

tzic [-d *directory*] [-l *localtime-link*] [-L *leap-file*]
[-p *posixrules-link*] [-s] [-v] [*source-file*]...

u3b

See machid.

u3b15

See machid.

u3b2

See machid.

u3b5

See machid.

ucbdiff

ucbdiff [-b] [-c] [-e] [-f] [-h] [-i] [-l] [-n] [-r] [-s] [-S *file*]
[-t] [-w] *dir1 dir2*
ucbdiff [-b] [-c] [-e] [-f] [-h] [-i] [-n] [-t] [-w] *file1 file2*
ucbdiff [-b] [-D*string*] [-i] [-w] *file1 file2*

ucbdiff3

ucbdiff3 [-e] [-E] [-x[*-3*]] [-X[*-3*]] *ver1 ver2 ver3*

udp

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

ul

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

umount

See mount.

uname

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

uncompact

See compact.

uncompress
See compress.

uncompressdir
See compress.

unexpand
See expand.

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

uniq
uniq [-c] [-d] [+*num*] [-*num*] [-u] [*infile* [*outfile*]]

units
units

unpack
See pack.

updater
updater [d] [r] [u] *local remote...*
updater [p] [r] [u] *local remote...*
updater [t] [r] [u] *local remote...*

uptime
uptime

users
users [*file*]

uucheck
uucheck [-v] [-x*debug-level*]

uucico
uucico [-c*device-type*] [-d*spool-directory*] [-f] [-i*interface*] [-r*mode*] [-s*system*] [-u*login-name*] [-x*debug-level*]

uucleanup
uucleanup [-C*days*] [-D*days*] [-m*string*] [-o*days*] [-s*system*] [-W*days*] [-X*days*] [-x*debug-level*]

uucp

uucp [-c] [-C] [-d] [-f] [-g*grade*] [-j] [-m] [-n*login-name*] [-r] [-s*file*] [-x*debug-level*] *source-file destination-file*

uucpd

/etc/uucpd

uudecode

See uuencode.

uudemon.admin

uudemon.admin

uudemon.cleanup

uudemon.cleanup

uudemon.hour

uudemon.hour

uudemon.poll

uudemon.poll

uuencode

uuencode [*source-file*] *decoded-name*
uudecode [*encoded-file*]

uuglist

uuglist [-l] [-u] [-x*debug-level*]

uulog

uulog [-cqx] [-l[*hours*]] [-*lines*] [-f*system*] [*system*]...
uulog [-cqx] [-l[*hours*]] [-*lines*] [-s*system*] [*system*]...

uuname

uuname [-c] [-l]

uupick

See uuto.

uusched

uusched [-u*debug-level*] [-x*debug-level*]

uusend

uusend [-m *file-permission*] -r *sourcefile system1*!*...remotefile*

uustat

uustat [-a] [-S*job-status*] [[-j] [-s*system*]] [-u*login-name*] [-x*debug-level*]
uustat -k*job-id* [-n] [-x*debug-level*]
uustat -m [-x*debug-level*]
uustat -p [-x*debug-level*]
uustat -q [-x*debug-level*]
uustat -r*job-id* [-n] [-x*debug-level*]
uustat -t*system* [-d*minutes*] [-c] [-x*debug-level*]

uuto

uuto [-m] [-p] *file... destination*
uupick [-s*system*]

Uutry

Uutry [-c*-device-type*] [-r] [-x*debug-level*] *system*

uux

uux [-] [-a*name*] [-b] [-C] [-c] [-g*grade*] [-j] [-n] [-p] [-r] [-s*file*] [-x*debug-level*] [-z] *command-string*

uuxqt

uuxqt [-s*system*] [-x*debug-level*]

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 *file...*

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

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

w

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

wall

wall

wc

wc [-[*chunk-size*]] [*file*]...

what

what [-s] *file...*

whatis

whatis *command...*

whereis

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

which

which [*name*]...

who

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

whoami

whoami

whodo

whodo

worm

worm [*size*]

worms

worms [-field] [-length *n*] [-number *n*] [-trail]

write

write *user* [*line*]

wtmpfix

See fwtmp.

wump

wump

xargs

xargs [-e*eofstr*] [-i*replstr*] [-l*number*] [-n*number*] [-p] [-s*size*] [-t] [-x] [*command* [*cmd-args*]]

xstr

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

yacc

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

yes

yes [*expletive*]

ypbind

See ypserv.

ypcat

ypcat [-d *domain-name*] [-k] [-t] *map-or-nick-name*
ypcat -x

ypinit

ypinit -m
ypinit -s *server-name*

ypmake

cd /etc/yp; make [*set-name*] [*variable=value...*]

ypmatch

ypmatch [-d *domain*] [-k] [-t] *key ... nickname-or-map-name*
ypmatch -x

yppasswd

yppasswd [*login-name*]

yppasswdd

rpc.yppasswdd *file* [-m *make-arg...*]

yppoll

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

yppush

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

ypserv

ypserv
ypbind [-s] [-secure] [-v] [-ypset] [-ypsetme]

ypset

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

ypwhich

ypwhich [-d *domain-name*] [-V1] [*host-name*]
ypwhich [-d *domain-name*] [-V2] [*host-name*]
ypwhich [-d *domain-name*] [[-t] -m [*map-or-nickname*]]
ypwhich -x

ypxfr

ypxfr [-c] [-d *domain-name*] [-f] [-h *host-name*] *map-name*
ypxfr -d *domain-name* [-C *tid prog ipadd port*] *map-name*

zcat

See compress.

zcmp

See compress.

zdiff

See compress.

zmore

See compress.

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