

The following is a list of the UNIX commands (utilities) in alphabetic order. The numbers after the commands are the page numbers. To refresh your memory, the command line format is shown again in Figure C.1.

Figure C.1

The Command Line Format

\$ command [-options] [arguments]

Generally filenames or pathnames

One or more single-letter options

The minus sign, indicating that this is an option

The command name

The system prompt

alias	299
This creates aliases for commands.	

at	3
This command runs another command or a list of commands at a later time	

Option	Operation	
-l	Lists all jobs that are submitted with at.	
-m	Mails you a short message of confirmation at completion of the job.	
-r	Removes the specified job numbers from the queue of jobs scheduled by at.	

banner		
This command displays its argument, the specified string, in large letters.		

cal			
This co	calendar		
You ca	cancel (cancel print requests).		
cat (c	concatenate) oncatenates/displays		
		ur current directory to another directory.	
This conters industry	chmod		
compress			
cp			
	Option	Operation	
UNIX	Linux Alternative		
-b	backup	Makes a backup of the specified file if file already exists.	
-i	interactive	Asks for confirmation if the target file already exists.	
_	recursive	Copies directories to a new directory.	
-r			
	verbose	Explain what is being done.	
	help	Displays the help page and exits.	

crypt		
		cut out" specific columns or fields from a file.
	Option	Operation
UNIX	Linux Alternative	
-f	fields	Specifies the field position.
-с	characters	Specifies the character position.
-d	delimiter	Specifies the field separator (delimiter) character.
	help	Displays the help page and exits.
	version	Displays the version information and exits.
		ek, month, date, and time.
df		
(dot).		
du		
	Option	Operation
UNIX	Linux Alternative	
-a	all	Display the size of directories and files.
-b	bytes	Displays the size of directories and files in bytes.
-s	summarize	Displays only the total blocks for the specified directory; subdirectories are not listed.
	help	Displays a usage message.
		D: 1 d : 'C d'

Displays the version information.

--version

relational operators.

	and displays (echoes) its arguments on the output device.
Escape Character	Meaning
\a	Audible alert (bell)
\ b	Backspace
\c	Inhibit the terminating newline
\ f	Form feed
\n	Carriage return and a line feed (newline)
\r	Carriage return without the line feed
\t	Horizontal tab
\ v	Vertical tab
This comm return a sta	and terminates the current shell program whenever it is executed. It can also tus code (RC) to indicate the success or failure of a program. It also terminates shell and logs you off if it is typed at the \$ prompt.
	and makes a specified list of variables available to other shells.

find
This command locates files that match a given criterion in a hierarchy of directories. With
the action options, you can instruct UNIX about what to do with the files once they are
found.

Search Option	Description	
-name filename	Finds files with the given filename.	
size + n	Finds files with the size n .	
-type file type	Finds files with the specified access mode.	
-atime + n	Finds files that were accessed <i>n</i> days ago.	
-mtime + n	Finds files that were modified n days ago.	
-newer filename	Finds files that were modified more recently than filename.	
Action Option	Description	
-print	Prints the pathname for each file found.	
-exec command\;	Lets you give <i>commands</i> to be applied to the files.	
-ok command\;	Asks for confirmation before applying the command.	

finger		
Option	Operation	
-b	Suppresses displaying of the user's HOME directory and shell in a long format display.	
-f	Suppresses displaying the header in a nonlong format output.	
-h	Suppresses displaying the .project file in a long format output.	
-l	Forces long format output.	
-р	Suppresses displaying the .plan file in a long format output.	
-s	Forces short format output.	

This command (utility) is used to transfer files from one system to another. Files of any type can be transferred, and you can specify whether the file is an ASCII or a binary file. You type **ftp** to start an FTP session.

FTP access commands	
Command	Description
open remote-hostname	Opens a connection to the FTP server on the specified host. It prompts you to enter the user name and password to log in on the remote host.
close	Closes current open connection and returns to the local FTP command. At this point you may issue the open command for a different remote host.
quit (bye)	Closes the current FTP session with the remote server and exits ftp . That is, it returns to UNIX shell level.

FTP file and directory commands	
Command	Description
cd remote-directory-name	Changes the current directory on the remote host to the specified directory.
lcd local-directory-name	Changes the current directory on the local host to the specified directory.
dir	Lists the current directory on the remote host.
pwd	Prints the name of the current directory on the remote host.
mkdir remote-directory-name	Makes a new directory on the remote host. Typically, you must have permission to do this.
delete remote-filename	Deletes a single specified file on the remote host.
mdelete remote-filenames	Deletes multiple files on the remote host.

FTP miscellaneous commands		
Command	Description	
? or help	Displays an informative message about the meaning of the specified command. If no argument is given, a list of the known commands is displayed.	
!	Switches to escape shell mode.	
hash	Displays hash sign (#) as feedback for each data block transferred. The size of a data block is 8192 bytes.	

grep (Global Regular Expression Print)
Searches for a specified pattern in file(s). If the specified pattern is found, the line
containing the pattern is displayed on your terminal

Option		Operation
UNIX	Linux Alternative	
-с	count	Displays only the count of the matching lines in each file that contains the match.
-i	ignore-case	Ignores the distinction between lower and uppercase letters in the search pattern.
-l	files-with-matches	Displays the names of the files with one or more matching lines, not the lines themselves.
-n	line-number	Displays a line number before each output line.
-v	revert-match	Displays only those lines that do not match the pattern.
	help	Displays help page and exits.
	version	Displays version information and exits.

ad.	42
~~	

This command displays the first part of a specified file. This is a quick way to check the contents of a file. The number of lines to be displayed is an option, and more than one file can be specified on the command line.

Option		Operation
UNIX	Linux Alternative	
-l	lines	Counts by lines. This is the default option.
-с	chars=num	Counts by characters.
	help	Displays the help page and exits.
	version	Displays the version information and exits.

Brings to the display a series of menus and questions that lead you to the descriptions of the most commonly used UNIX commands.

This command is a Korn and Bourne Again shell feature that keeps a list of all the commands you enter during your sessions.

kill		
A comp	uter-aided instruction program that is arranged in a series of courses and lessons. ys the menu of courses and lets you select your desired course and lesson.	
	mmand provides arithmetic operations.	
Creates	links between an existing file and another filename or directory. It lets you have an one name for a file.	
	e printer)	
Option	ion Operation	
-d	Prints on a specific printer.	
-m	Sends mail to the user mailbox after completion of the print request.	
-n	Prints specified number of copies of the file.	
-s	Suppresses feedback messages.	
This cor	Ipr (line printer)	
Option	Option Operation	
-p	Prints on a specific (named) printer.	
-#	Prints specified number of copies of the file.	
T	Prints a specified title on the banner page of the output.	
-T	Finits a specified title on the banner page of the output.	
-1 -m	Sends mail to the user mailbox after completion of the print request.	

Ipstat (line printer status)		
Option	Operation	
-d	Prints the name of the system default printer for print requests.	

Is (list)	
This command lists the contents of your current directory, or any directory you specify.	

Option		Operation
UNIX	Linux Alternative	
-a	all	Lists all files, including the hidden files.
-C	format=vertical format=horizontal	Lists files in multicolumn format. Entries are sorted down the columns.
-F	classify	Places a forward slash (/) after each filename if that file is a directory, and an asterisk (*) if it is an executable file.
-l	format=single-column	Lists files in a long format, showing detailed information about the files.
-m	format=commas	Lists files across the page, separated by commas.
-р		Places a forward slash (/) after each filename if that file is a directory.
-r	reverse	Lists files in reverse alphabetical order.
-R	recursive	Recursively lists the contents of the directory.
-s	size	Show size of each file in blocks.
-x	format=horizontal format=across	Lists files in multicolumn format. Entries are sorted across the line.
	help	Displays a usage message.

mailx	
This utility provides the electronic mail system for the users. You can send messages to	

This utility provides the electronic mail system for the users. You can send messages to other users on the system, regardless of whether they are logged on or not.

Option	Operation	
-f filename	Reads mail from the specified <i>filename</i> instead of the system <i>mailbox</i> . If no file is specified, it reads from mbox.	
-H	Displays a list of the message headers.	
-s subject	Sets the subject field to the string <i>subject</i> .	

Command	Operation	
!	Lets you execute the shell commands (the shell escape).	
cd directory	Changes to the specified directory, or to the HOME directory if none is specified.	
d	Deletes the specified messages.	
f	Displays the headlines of the current message.	
q	Exits mailx and removes the messages from the system mailbox.	
h	Displays active message headers.	
m users	Sends mail to specified <i>users</i> .	
R messages	Replies to the sender of the <i>messages</i> .	
r messages	Replies to the sender of the <i>messages</i> and all the other recipients of the same <i>messages</i> .	
s filename	Saves (appends) the indicated messages to the file named <i>filename</i> .	
t messages	ges Displays (types) the specified messages.	
u messages	Undeletes the specified <i>messages</i> .	
x	Exits mailx does not remove messages from the system mailbox.	

mailx tilde escape commands
When you invoke mailx to send mail to others, it places itself in input mode, ready for you
to compose your message. The commands in this mode start with a tilde (~) and are called
tilde escape commands

Command	Operation	
~?	Displays a list of all the tilde escape commands.	
~! command	Lets you invoke the specified shell <i>command</i> while composing your message.	
~e	Invokes an editor for editing your message. The editor to be used is defined in the mail variable called <i>EDITOR</i> .	
~q	Quits input mode. Saves your partially composed message is saved in the file called dead.letter.	
~r filename	Reads the file named <i>filename</i> and adds its contents to your message.	
~< filename	Reads the file named <i>filename</i> (using the redirection operator) and adds its contents to your message.	
~ command</th <th>Executes the specified command and places its output into your message.</th>	Executes the specified command and places its output into your message.	
~V	Invokes the default visual editor, the vi editor, or uses the value of the mail variable <i>VISUAL</i> , which can be set up for other editors.	
~w filename	Writes the message currently being composed to the specified <i>filename</i> .	

man	
This command shows pages from the online system documentation.	

mesg
This command is set to n to prohibit unwanted write messages. It is set to y to receive
messages.

Option	Operation
-р	Lets you create levels of directories in a single command line.

more	
Displays files one screen at a time. This is useful for reading large files.	

Option		Operation
UNIX	Linux Alternative	
-lines	-num <i>lines</i>	Displays the indicated number of <i>lines</i> per screen.
+line-number		Starts up at <i>line-number</i> .
+/pattern		Starts two lines above the line containing the <i>pattern</i> .
-с	-р	Clears the screen before displaying each page instead of scrolling. This is sometimes faster.
-d		Displays the prompt [Hit space to continue, Del to abort].
	help	Displays the help page and exits.

This command renames mes of moves mes from one location to another.

Option		Operation
UNIX	Linux Alternative	
-b	backup	Makes backup of the specified file if file already exists.
-i	interactive	Asks for confirmation if the target file already exists.
-f	force	Removes target file if file already exists and does not ask for confirmation.
-v	verbose	Explains what is being done.
	help	Displays the help page and exits.
	version	Displays version information and exits.

This command is used to look at the latest news in the system. It is used by the system administrator to inform others of the events happening.

Option	Operation	
-a	Displays all the news items, whether they are in old or new files.	
-n	Lists only the names of the news files (headers).	
-s	Displays the number of the current news items.	

nohup	285
This prevents the termination of the background process when you log out.	

passwd

paste
This command is used to join files together line by line, or to create new files by pasting
together fields from two or more files.

Option		Operation
UNIX	Linux Alternative	
-d	delimiters	Specifies the field separator (delimiter) character.
	help	Displays the help page and exits.
	version	Displays the version information and exits.

Option	Operation
-n	Does not require [Return] to complete the single-letter commands.
-S	Displays messages and prompts in reverse video.
-num	Sets the number of lines per screen to the integer <i>num</i> . The default value is 23 lines.
-pstr	Changes the prompt: (colon) to the string specified as str.
+line-num	Starts displaying the file from the line specified in <i>line-num</i> .
+/pattern	Starts viewing at the line containing the first occurrence of the specified <i>pattern</i> .

The pg Command Key Operators		
Key	Operation	
+ <i>n</i>	Advances n screens, where n is an integer number.	
-n	Backs up n screens, where n is an integer number.	
+ <i>nl</i>	Advances n lines, where n is an integer number.	
-nl	Backs up n lines, where n is an integer number.	
n	Goes to screen n , where n is an integer number.	

pr	219
Your file is formatted before printing or viewing it on the screen.	

	Option	Operation
UNIX	Linux Alternative	
+page	pages=page	Starts displaying from the specified <i>page</i> . The default is page 1.
-columns	columns=columns	Displays output in the specified number of <i>columns</i> . The default is one column.
-a	across	Displays output in columns across (rather than down) the page, one line per column.
-d	double-space	Displays output double spaced.
-hstring	header=string	Replaces the filename in the header with the specified <i>string</i> .
-lnumber	length=number	Sets the page length to the specified <i>number</i> of lines. The default is 66 lines.
-m	merge	Displays all the specified files in multiple columns.
-р		Pauses at the end of each page and sounds the bell.
-character	separator=character	Separates columns with a single specified <i>character</i> . If character is not specified, then [Tab] is used.
-t	omit-header	Suppresses the five-line header and five-line trailer.
-wnumber	width=number	Sets line width to the specified number of characters. The default is 72.
	help	Displays help page and exits.
	version	Displays version information and exits.

ps (process status)			
Option		Operation	
-a	Displays the status	Displays the status of all the active processes, not just the user's.	
-f	Displays a full list of	of information, including the full command line.	
pwd (print working directory)			
		that repeats the last command or commands from the history	
	read		
UNIX p	rovides a set of comm	nands that allow you to log into a remote server and act as onnected to that server and all its resources.	
UNIX p	rovides a set of comm you were physically c	nands that allow you to log into a remote server and act as	
UNIX p	rovides a set of comm you were physically c	nands that allow you to log into a remote server and act as onnected to that server and all its resources. Operation	
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UNIX p though y	Remote copy pro	onnected to that server and all its resources. Operation ogram	
UNIX p though y Comman	Remote shell pro	onnected to that server and all its resources. Operation ogram	
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rmdir (remove directory)		
set		
sh, ksh, or bash		
Option	Operation	
-n	Reads commands but does not execute them.	
-v	Prints the input to the shell as the shell reads it.	
-X	Prints command lines and their arguments as they are executed. This option is used mostly for debugging.	
sleep		
sort		
Option	Operation	
-b	Ignores leading blanks.	
-d	Uses dictionary order for sorting. Ignores punctuation and control characters.	
-f	Ignores the distinction between lowercase and uppercase letters.	
-n	Numbers are sorted by their arithmetic values.	
-0	Stores the output in a specified file.	
-r	Reverses the order of the sort from ascending to descending.	

This command checks the spelling of a specified document or words entered from the keyboard. It only displays the words not found in the spelling list and does not suggest a correct spelling.

Option	Operation
-b	Checks with British spelling.
-v	Displays the words that are not in the spelling list and their derivation.
-X	Displays plausible stems for each word being checked.

This command sets options that control the capabilities of your terminal. There are more than a hundred different settings, and the following table lists only some of the options.

Option	Operation	
echo [-echo]	Echoes [does not echo] the typed characters; the default is echo .	
raw [-raw]	Disables [enables] the special meaning of the metacharacters; the default is -raw .	
intr	Generates an interrupt signal; usually the [Del] key is used.	
erase	[Backspace]. Erases the preceding character; usually the # key is used.	
kill	Deletes the entire line; usually @ or [Ctrl-u] is used.	
eof	Generates the (end-of-file) signal from the terminal; usually [Ctrl-d] is used.	
ek	Resets the erase and kill keys to # and @, respectively.	
sane	Sets the terminal characteristics to sensible default values.	

This command displays the last part (tail end) of a specified file. This is a quick way to check the contents of a file. The options give the flexibility to specify a desired part of the file.

Option		Operation
UNIX	Linux Alternative	
-l	lines	Counts by lines. This is the default option.
-c	chars=num	Counts by characters.
	help	Displays the help page and exits.
	version	Displays the version information and exits.

different types of expressions.

talk			
tar			
	Option	Operation	
UNIX	Linux Alternative		
-с	create	(create) Creates a new tarfile. Writing begins at the beginning of the tarfile.	
-f	file	(file) Uses the next argument as a place where the archive is to be placed.	
-r	concatenate	(replace) Writes a new archive at the end of the tarfile.	
-t	list	(table of contents) Lists the name of the files in the tarfile.	
-X	extract orget	(extract) Extracts files from the tarfile.	
-v	verbose	(verbose) Provides additional information about the tarfile entries.	
	help	Displays a usage message.	
	version	Displays the version information.	
tee			
Option	Operation		
-a	Appends output to	a file without overwriting an existing file.	
-i	Ignores interrupts;	does not respond to the interrupt signals.	
telnet			
test			

time			
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This command provides information about the computer time your command uses. It reports the real time, user time, and system time required by a specified command.

This command is used with the terminfo database, which contains codes for terminal characteristics and facilitates the manipulation of your terminal characteristics such as boldface text, clear screen, and so on.

Option	Operation		
bel	Echoes the terminal's bell character.		
blink	Makes a blinking display.		
bold	Makes a boldface display.		
clear	Clears the screen.		
cup r c	Moves cursor to row r and column c .		
dim	Dims the display.		
ed	Clears from the cursor position to the end of the screen.		
el	Clears from the cursor position to the end of the line.		
smso	Starts stand out mode.		
rmso	Ends stand out mode.		
smul	Starts underline mode.		
rmul	Ends underline mode.		
rev	Shows reverse video, black on white display.		
sgr0	Turns off all the attributes.		

This command sets and resets the interrupt signals. The following table shows some of the signals you can use to control the termination of your program.

Signal Number	Name	Meaning	
1	hang up	Terminal connection is lost.	
2	interrupt	One of the interrupt keys has been pressed.	
3	quit	One of the quit keys has been pressed.	
9	kill	The kill -9 command has been issued.	
15	terminator	The kill command has been issued.	

logged on.

	_		formation about another command, such as whether the specinand or a shell built-in command.	
wall . This conevents.			by the system administrator to warn users of some imminent	
wc This con		s number	of characters, words, or lines in the specified file.	
	Option		Operation	
UNIX	Linux Alternative			
-l	lines		Reports the number of lines.	
-w	words		Reports the number of words.	
-c	chars		Reports the number of characters.	
	help		Displays the help page and exits.	
	version		Displays version information and exits.	
who .		terminal		
Option	Linux	Operation		
-q	count	The quick who ; just displays the name and number of users.		
-H	heading	Displays heading above each column.		
-b		Displays the time and date of the last reboot.		
	help	Displays a usage message.		
	1			
write This con	 mmand is use	· · · · · · d for teri		