cmp - compare two files byte by byte

SYNOPSIS

cmp [OPTION]... FILE1 [FILE2 [SKIP1 [SKIP2]]]

DESCRIPTION

Compare two files byte by byte.

-b --print-bytes

Print differing bytes.

-i SKIP --ignore-initial=SKIP

Skip the first SKIP bytes of input.

-i SKIP1:SKIP2 --ignore-initial=SKIP1:SKIP2

Skip the first SKIP1 bytes of FILE1 and the first SKIP2 bytes of FILE2.

-l --verbose

Output byte numbers and values of all differing bytes.

-n LIMIT --bytes=LIMIT

Compare at most LIMIT bytes.

-s --quiet --silent

Output nothing; yield exit status only.

-v --version

Output version info.

--help Output this help.

SKIP1 and SKIP2 are the number of bytes to skip in each file. SKIP values may be followed by the following multiplicative suffixes: kB 1000, K 1024, MB 1,000,000, M 1,048,576, GB 1,000,000,000, G 1,073,741,824, and so on for T, P, E, Z, Y.

If a FILE is '-' or missing, read standard input. Exit status is 0 if inputs are the same, 1 if different, 2 if trouble.

AUTHOR

Written by Torbjorn Granlund and David MacKenzie.

REPORTING BUGS

Report bugs to <bug-gnu-utils@gnu.org>.

COPYRIGHT

Copyright © 2004 Free Software Foundation, Inc.

This is free software; see the source for copying conditions. There is NO warranty; not even for MER-CHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.

SEE ALSO

The full documentation for **cmp** is maintained as a Texinfo manual. If the **info** and **cmp** programs are properly installed at your site, the command

info diff

should give you access to the complete manual.

diff - find differences between two files

SYNOPSIS

diff [options] from-file to-file

DESCRIPTION

In the simplest case, diff compares the contents of the two files from-file and to-file. A file name of – stands for text read from the standard input. As a special case, diff – compares a copy of standard input to itself.

If *from-file* is a directory and *to-file* is not, *diff* compares the file in *from-file* whose file name is that of *to-file*, and vice versa. The non-directory file must not be –.

If both *from-file* and *to-file* are directories, *diff* compares corresponding files in both directories, in alphabetical order; this comparison is not recursive unless the **-r** or **--recursive** option is given. *diff* never compares the actual contents of a directory as if it were a file. The file that is fully specified may not be standard input, because standard input is nameless and the notion of "file with the same name" does not apply.

diff options begin with –, so normally *from-file* and *to-file* may not begin with –. However, –– as an argument by itself treats the remaining arguments as file names even if they begin with –.

Options

Below is a summary of all of the options that GNU *diff* accepts. Most options have two equivalent names, one of which is a single letter preceded by -, and the other of which is a long name preceded by -. Multiple single letter options (unless they take an argument) can be combined into a single command line word: -ac is equivalent to -a-c. Long named options can be abbreviated to any unique prefix of their name. Brackets ([and]) indicate that an option takes an optional argument.

- -lines Show lines (an integer) lines of context. This option does not specify an output format by itself; it has no effect unless it is combined with -c or -u. This option is obsolete. For proper operation, *patch* typically needs at least two lines of context.
- -a Treat all files as text and compare them line-by-line, even if they do not seem to be text.
- **−b** Ignore changes in amount of white space.
- **-B** Ignore changes that just insert or delete blank lines.

--brief

Report only whether the files differ, not the details of the differences.

- **−c** Use the context output format.
- -C lines

--context[=lines]

Use the context output format, showing *lines* (an integer) lines of context, or three if *lines* is not given. For proper operation, *patch* typically needs at least two lines of context.

--changed-group-format=format

Use *format* to output a line group containing differing lines from both files in if-then-else format

-d Change the algorithm to perhaps find a smaller set of changes. This makes diff slower (sometimes much slower).

-D name

Make merged if-then-else format output, conditional on the preprocessor macro *name*.

-е

—ed Make output that is a valid *ed* script.

--exclude=pattern

When comparing directories, ignore files and subdirectories whose basenames match *pattern*.

--exclude-from=file

When comparing directories, ignore files and subdirectories whose basenames match any pattern contained in *file*.

--expand-tabs

Expand tabs to spaces in the output, to preserve the alignment of tabs in the input files.

-f Make output that looks vaguely like an ed script but has changes in the order they appear in the file.

-F regexp

In context and unified format, for each hunk of differences, show some of the last preceding line that matches *regexp*.

--forward-ed

Make output that looks vaguely like an **ed** script but has changes in the order they appear in the file.

- **-h** This option currently has no effect; it is present for Unix compatibility.
- **-H** Use heuristics to speed handling of large files that have numerous scattered small changes.

--horizon-lines=lines

Do not discard the last *lines* lines of the common prefix and the first *lines* lines of the common suffix.

-i Ignore changes in case; consider upper- and lower-case letters equivalent.

-I regexp

Ignore changes that just insert or delete lines that match *regexp*.

--ifdef=name

Make merged if-then-else format output, conditional on the preprocessor macro name.

--ignore-all-space

Ignore white space when comparing lines.

--ignore-blank-lines

Ignore changes that just insert or delete blank lines.

--ignore-case

Ignore changes in case; consider upper- and lower-case to be the same.

--ignore-matching-lines=regexp

Ignore changes that just insert or delete lines that match regexp.

--ignore-space-change

Ignore changes in amount of white space.

--initial-tab

Output a tab rather than a space before the text of a line in normal or context format. This causes the alignment of tabs in the line to look normal.

−l Pass the output through *pr* to paginate it.

-Llabel

--label=label

Use *label* instead of the file name in the context format and unified format headers.

--left-column

Print only the left column of two common lines in side by side format.

--line-format=format

Use format to output all input lines in in-then-else format.

--minimal

Change the algorithm to perhaps find a smaller set of changes. This makes *diff* slower (sometimes much slower).

-n Output RCS-format diffs; like **-f** except that each command specifies the number of lines affected.

-N

--new-file

In directory comparison, if a file is found in only one directory, treat it as present but empty in the other directory.

--new-group-format=format

Use *format* to output a group of lines taken from just the second file in if-then-else format.

--new-line-format=format

Use *format* to output a line taken from just the second file in if-then-else format.

--old-group-format=format

Use format to output a group of lines taken from just the first file in if-then-else format.

--old-line-format=format

Use *format* to output a line taken from just the first file in if-then-else format.

- **-p** Show which C function each change is in.
- **-P** When comparing directories, if a file appears only in the second directory of the two, treat it as present but empty in the other.

--paginate

Pass the output through pr to paginate it.

- -q Report only whether the files differ, not the details of the differences.
- -r When comparing directories, recursively compare any subdirectories found.
- --rcs Output RCS-format diffs; like -f except that each command specifies the number of lines affected.

--recursive

When comparing directories, recursively compare any subdirectories found.

--report-identical-files

- **-s** Report when two files are the same.
- **-S** *file* When comparing directories, start with the file *file*. This is used for resuming an aborted comparison.

--sdiff-merge-assist

Print extra information to help *sdiff*. *sdiff* uses this option when it runs *diff*. This option is not intended for users to use directly.

--show-c-function

Show which C function each change is in.

--show-function-line=regexp

In context and unified format, for each hunk of differences, show some of the last preceding line that matches *regexp*.

--side-by-side

Use the side by side output format.

--speed-large-files

Use heuristics to speed handling of large files that have numerous scattered small changes.

--starting-file=file

When comparing directories, start with the file *file*. This is used for resuming an aborted comparison.

--suppress-common-lines

Do not print common lines in side by side format.

- -t Expand tabs to spaces in the output, to preserve the alignment of tabs in the input files.
- **-T** Output a tab rather than a space before the text of a line in normal or context format. This causes the alignment of tabs in the line to look normal.
- --text Treat all files as text and compare them line-by-line, even if they do not appear to be text.

−u Use the unified output format.

--unchanged-group-format=format

Use *format* to output a group of common lines taken from both files in if-then-else format.

$-\!-\!unchanged\!-\!line\!-\!format\!=\!format$

Use *format* to output a line common to both files in if-then-else format.

--unidirectional-new-file

When comparing directories, if a file appears only in the second directory of the two, treat it as present but empty in the other.

-U lines

--unified[=lines]

Use the unified output format, showing *lines* (an integer) lines of context, or three if *lines* is not given. For proper operation, *patch* typically needs at least two lines of context.

-1

--version

Output the version number of diff.

-w Ignore white space when comparing lines.

-W columns

--width=columns

Use an output width of *columns* in side by side format.

-x pattern

When comparing directories, ignore files and subdirectories whose basenames match pattern.

- -X *file* When comparing directories, ignore files and subdirectories whose basenames match any pattern contained in *file*.
- **−y** Use the side by side output format.

SEE ALSO

cmp(1), comm(1), diff3(1), ed(1), patch(1), pr(1), sdiff(1).

DIAGNOSTICS

An exit status of 0 means no differences were found, 1 means some differences were found, and 2 means trouble.

diff3 - compare three files line by line

SYNOPSIS

diff3 [OPTION]... MYFILE OLDFILE YOURFILE

DESCRIPTION

Compare three files line by line.

-е --ed

Output unmerged changes from OLDFILE to YOURFILE into MYFILE.

-E --show-overlap

Output unmerged changes, bracketing conflicts.

-A --show-all

Output all changes, bracketing conflicts.

-x --overlap-only

Output overlapping changes.

-X Output overlapping changes, bracketing them.

-3 --easy-only

Output unmerged nonoverlapping changes.

-m --merge

Output merged file instead of ed script (default -A).

-L LABEL --label=LABEL

Use LABEL instead of file name.

-i Append 'w' and 'q' commands to ed scripts.

-a --text

Treat all files as text.

--strip-trailing-cr

Strip trailing carriage return on input.

-T --initial-tab

Make tabs line up by prepending a tab.

--diff-program=PROGRAM

Use PROGRAM to compare files.

-v --version

Output version info.

--help Output this help.

If a FILE is '-', read standard input. Exit status is 0 if successful, 1 if conflicts, 2 if trouble.

AUTHOR

Written by Randy Smith.

REPORTING BUGS

Report bugs to <bug-gnu-utils@gnu.org>.

COPYRIGHT

Copyright © 2004 Free Software Foundation, Inc.

This is free software; see the source for copying conditions. There is NO warranty; not even for MER-CHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.

SEE ALSO

The full documentation for **diff3** is maintained as a Texinfo manual. If the **info** and **diff3** programs are properly installed at your site, the command

info diff

should give you access to the complete manual.

sdiff - side-by-side merge of file differences

SYNOPSIS

sdiff [OPTION]... FILE1 FILE2

DESCRIPTION

Side-by-side merge of file differences.

-o FILE --output=FILE

Operate interactively, sending output to FILE.

-i --ignore-case

Consider upper- and lower-case to be the same.

-E --ignore-tab-expansion

Ignore changes due to tab expansion.

-b --ignore-space-change

Ignore changes in the amount of white space.

-W --ignore-all-space

Ignore all white space.

-B --ignore-blank-lines

Ignore changes whose lines are all blank.

-I RE --ignore-matching-lines=RE

Ignore changes whose lines all match RE.

--strip-trailing-cr

Strip trailing carriage return on input.

-a --text

Treat all files as text.

-w NUM --width=NUM

Output at most NUM (default 130) print columns.

-l --left-column

Output only the left column of common lines.

-s --suppress-common-lines

Do not output common lines.

-t --expand-tabs

Expand tabs to spaces in output.

--tabsize=NUM

Tab stops are every NUM (default 8) print columns.

-d --minimal

Try hard to find a smaller set of changes.

-H --speed-large-files

Assume large files and many scattered small changes.

--diff-program=PROGRAM

Use PROGRAM to compare files.

-v --version

Output version info.

--help Output this help.

If a FILE is '-', read standard input. Exit status is 0 if inputs are the same, 1 if different, 2 if trouble.

AUTHOR

Written by Thomas Lord.

REPORTING BUGS

Report bugs to <bug-gnu-utils@gnu.org>.

COPYRIGHT

Copyright © 2004 Free Software Foundation, Inc.

This is free software; see the source for copying conditions. There is NO warranty; not even for MER-CHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.

SEE ALSO

The full documentation for **sdiff** is maintained as a Texinfo manual. If the **info** and **sdiff** programs are properly installed at your site, the command

info diff

should give you access to the complete manual.