

NAME

GNU diff – compare files line by line

SYNOPSIS

diff [*OPTION*]... *FILES*

DESCRIPTION

Compare *FILES* line by line.

Mandatory arguments to long options are mandatory for short options too.

--normal

output a normal diff (the default)

-q, --brief

report only when files differ

-s, --report-identical-files

report when two files are the same

-c, -C NUM, --context[=NUM]

output NUM (default 3) lines of copied context

-u, -U NUM, --unified[=NUM]

output NUM (default 3) lines of unified context

-e, --ed

output an ed script

-n, --rcs

output an RCS format diff

-y, --side-by-side

output in two columns

-W, --width=NUM

output at most NUM (default 130) print columns

--left-column

output only the left column of common lines

--suppress-common-lines

do not output common lines

-p, --show-c-function

show which C function each change is in

-F, --show-function-line=RE

show the most recent line matching RE

--label LABEL

use LABEL instead of file name and timestamp (can be repeated)

-t, --expand-tabs

expand tabs to spaces in output

-T, --initial-tab

make tabs line up by prepending a tab

--tabsize=NUM

tab stops every NUM (default 8) print columns

--suppress-blank-empty

suppress space or tab before empty output lines

-l, --paginate

pass output through 'pr' to paginate it

-r, --recursive
recursively compare any subdirectories found

--no-dereference
don't follow symbolic links

-N, --new-file
treat absent files as empty

--unidirectional-new-file
treat absent first files as empty

--ignore-file-name-case
ignore case when comparing file names

--no-ignore-file-name-case
consider case when comparing file names

-x, --exclude=PAT
exclude files that match PAT

-X, --exclude-from=FILE
exclude files that match any pattern in FILE

-S, --starting-file=FILE
start with FILE when comparing directories

--from-file=FILE1
compare FILE1 to all operands; FILE1 can be a directory

--to-file=FILE2
compare all operands to FILE2; FILE2 can be a directory

-i, --ignore-case
ignore case differences in file contents

-E, --ignore-tab-expansion
ignore changes due to tab expansion

-Z, --ignore-trailing-space
ignore white space at line end

-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 where lines are all blank

-I, --ignore-matching-lines=RE
ignore changes where all lines match RE

-a, --text
treat all files as text

--strip-trailing-cr
strip trailing carriage return on input

-D, --ifdef=NAME
output merged file with '#ifdef NAME' diffs

--GTYPE-group-format=GFMT
format GTYPE input groups with GFMT

--line-format=LFMT

format all input lines with LFMT

--LTYPE--line-format=LFMT

format LTYPE input lines with LFMT

These format options provide fine-grained control over the output of diff, generalizing **-D/--ifdef**.

LTYPE is 'old', 'new', or 'unchanged'.

GTYPE is LTYPE or 'changed'.

GFMT (only) may contain:

%< lines from FILE1

%> lines from FILE2

%= lines common to FILE1 and FILE2

%[-][WIDTH][.[PREC]]{doxX}LETTER
printf-style spec for LETTER

LETTERS are as follows for new group, lower case for old group:

F first line number

L last line number

N number of lines = L-F+1

E F-1

M L+1

%(A=B?T:E)

if A equals B then T else E

LFMT (only) may contain:

%L contents of line

%l contents of line, excluding any trailing newline

%[-][WIDTH][.[PREC]]{doxX}n
printf-style spec for input line number

Both GFMT and LFMT may contain:

%% %

%c'C' the single character C

%c'\OOO'
the character with octal code OOO

C the character C (other characters represent themselves)

-d, --minimal

try hard to find a smaller set of changes

--horizon-lines=NUM

keep NUM lines of the common prefix and suffix

--speed-large-files

assume large files and many scattered small changes

--color[=WHEN]

colorize the output; WHEN can be 'never', 'always', or 'auto' (the default)

--palette=PALETTE

the colors to use when **--color** is active; PALETTE is a colon-separated list of terminfo capabilities

--help display this help and exit

-v, --version

output version information and exit

FILES are 'FILE1 FILE2' or 'DIR1 DIR2' or 'DIR FILE' or 'FILE DIR'. If **--from-file** or **--to-file** is given, there are no restrictions on FILE(s). If a FILE is '-', read standard input. Exit status is 0 if inputs are the same, 1 if different, 2 if trouble.

AUTHOR

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REPORTING BUGS

Report bugs to: bug-diffutils@gnu.org

GNU diffutils home page: [<https://www.gnu.org/software/diffutils/>](https://www.gnu.org/software/diffutils/)

General help using GNU software: [<https://www.gnu.org/gethelp/>](https://www.gnu.org/gethelp/)

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SEE ALSO

[wdiff\(1\)](#), [cmp\(1\)](#), [diff3\(1\)](#), [sdiff\(1\)](#), [patch\(1\)](#)

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

info GNU

should give you access to the complete manual.