

NAME

nanorc – GNU nano’s configuration file

NOTICE

Starting with version 4.0, **nano** no longer hard-wraps an overlong line by default. It further uses smooth scrolling by default, and by default includes the line below the title bar into the editing area.

If you want the old, Pico behavior back, you can use **set breaklonglines**, **set jumpyscrolling**, and **set emptyline**.

DESCRIPTION

The *nanorc* file contains the default settings for **nano**, a small and friendly editor. The file should be in Unix format, not in DOS or Mac format. During startup, **nano** will first read the system-wide settings, from */etc/nanorc* (the exact path might be different on your system), and then the user-specific settings, either from *~.nanorc* or from *\$XDG_CONFIG_HOME/nano/nanorc* or from *~.config/nano/nanorc*, whichever is encountered first.

OPTIONS

The configuration file accepts a series of **set** and **unset** commands, which can be used to configure nano on startup without using command-line options. Additionally, there are some commands to define syntax highlighting and to rebind keys -- see the two separate sections on those. **nano** reads one command per line.

Options in *nanorc* files take precedence over nano’s defaults, and command-line options override *nanorc* settings. Also, options that do not take an argument are unset by default. So using the **unset** command is only needed when wanting to override a setting of the system’s *nanorc* file in your own *nanorc*. Options that take an argument cannot be unset.

Quotes inside the *characters* parameters below should not be escaped. The last double quote on the line will be seen as the closing quote.

The supported commands and arguments are:

set afterends

Make Ctrl+Right stop at word ends instead of beginnings.

set allow_insecure_backup

When backing up files, allow the backup to succeed even if its permissions can’t be (re)set due to special OS considerations. You should NOT enable this option unless you are sure you need it.

set atblanks

When soft line wrapping is enabled, make it wrap lines at blank characters (tabs and spaces) instead of always at the edge of the screen.

set autoindent

Automatically indent a newly created line to the same number of tabs and/or spaces as the previous line (or as the next line if the previous line is the beginning of a paragraph).

set backup

When saving a file, create a backup file by adding a tilde (~) to the file’s name.

set backupdir *directory*

Make and keep not just one backup file, but make and keep a uniquely numbered one every time a file is saved -- when backups are enabled with **set backup** or **--backup** or **-B**. The uniquely numbered files are stored in the specified *directory*.

set boldtext

Use bold instead of reverse video for the title bar, status bar, key combos, function tags, line numbers, and selected text. This can be overridden by setting the options **titlecolor**, **statuscolor**, **keycolor**, **functioncolor**, **numbercolor**, and **selectedcolor**.

set brackets *"characters"*

Set the characters treated as closing brackets when justifying paragraphs. This may not include blank characters. Only closing punctuation (see **set punct**), optionally followed by the specified closing brackets, can end sentences. The default value is `">}]"`.

set breaklonglines

Automatically hard-wrap the current line when it becomes overlong.

set casesensitive

Do case-sensitive searches by default.

set constantshow

Constantly display the cursor position in the status bar. This overrides the option **quickblank**.

set cutfromcursor

Use cut-from-cursor-to-end-of-line by default, instead of cutting the whole line.

set emptyline

Do not use the line below the title bar, leaving it entirely blank.

set errorcolor *fgcolor,bgcolor*

Use this color combination for the status bar when an error message is displayed. The default value is **brightwhite,red**. See **set titlecolor** for valid color names.

set fill *number*

Set the target width for justifying and automatic hard-wrapping at this *number* of columns. If the value is 0 or less, wrapping will occur at the width of the screen minus *number* columns, allowing the wrap point to vary along with the width of the screen if the screen is resized. The default value is **-8**.

set functioncolor *fgcolor,bgcolor*

Specify the color combination to use for the function descriptions in the two help lines at the bottom of the screen. See **set titlecolor** for more details.

set guidestripe *number*

Draw a vertical stripe at the given column, to help judge the width of the text. (The color of the stripe can be changed with **set stripecolor**.)

set historylog

Save the last hundred search strings and replacement strings and executed commands, so they can be easily reused in later sessions.

set jumpyscrolling

Scroll the buffer contents per half-screen instead of per line.

set keycolor *fgcolor,bgcolor*

Specify the color combination to use for the shortcut key combos in the two help lines at the bottom of the screen. See **set titlecolor** for more details.

set linenumbers

Display line numbers to the left of the text area.

set locking

Enable vim-style lock-files for when editing files.

set matchbrackets *"characters"*

Set the opening and closing brackets that can be found by bracket searches. This may not include blank characters. The opening set must come before the closing set, and the two sets must be in the same order. The default value is `"(<[>)]"`.

set morespace

Deprecated option since it has become the default setting. When needed, use **unset emptyline** instead.

set mouse

Enable mouse support, if available for your system. When enabled, mouse clicks can be used to place the cursor, set the mark (with a double click), and execute shortcuts. The mouse will work in the X Window System, and on the console when gpm is running. Text can still be selected through dragging by holding down the Shift key.

set multibuffer

When reading in a file with ^R, insert it into a new buffer by default.

set noconvert

Don't convert files from DOS/Mac format.

set nohelp

Don't display the two help lines at the bottom of the screen.

set nonewlines

Don't automatically add a newline when a text does not end with one. (This can cause you to save non-POSIX text files.)

set nopauses

Don't pause between warnings at startup. This means that only the last one will be visible (when there are multiple ones).

set nowrap

Deprecated option since it has become the default setting. When needed, use **unset breaklonglines** instead.

set numbercolor *fgcolor,bgcolor*

Specify the color combination to use for line numbers. See **set titlecolor** for more details.

set operatingdir *directory*

nano will only read and write files inside *directory* and its subdirectories. Also, the current directory is changed to here, so files are inserted from this directory. By default, the operating directory feature is turned off.

set positionlog

Save the cursor position of files between editing sessions. The cursor position is remembered for the 200 most-recently edited files.

set preserve

Preserve the XON and XOFF keys (^Q and ^S).

set punct "*characters*"

Set the characters treated as closing punctuation when justifying paragraphs. This may not include blank characters. Only the specified closing punctuation, optionally followed by closing brackets (see **brackets**), can end sentences. The default value is "!.?".

set quickblank

Do quick status-bar blanking: status-bar messages will disappear after 1 keystroke instead of 25. The option **constantshow** overrides this.

set quotestr "*regex*"

Set the regular expression for matching the quoting part of a line. The default value is "`^([\t]*([!#%&;>|])/?)+`". (Note that `\t` stands for an actual Tab character.) This makes it possible to rejustify blocks of quoted text when composing email, and to rewrap blocks of line comments when writing source code.

set rawsequences

Interpret escape sequences directly (instead of asking **ncurses** to translate them). If you need this option to get your keyboard to work properly, please report a bug. Using this option disables **nano**'s

mouse support.

set rebinddelete

Interpret the Delete and Backspace keys differently so that both Backspace and Delete work properly. You should only use this option when on your system either Backspace acts like Delete or Delete acts like Backspace.

set regexp

Do regular-expression searches by default. Regular expressions in **nano** are of the extended type (ERE).

set selectedcolor *fgcolor,bgcolor*

Specify the color combination to use for selected text. See **set titlecolor** for more details.

set showcursor

Put the cursor on the highlighted item in the file browser, to aid braille users.

set smarthome

Make the Home key smarter. When Home is pressed anywhere but at the very beginning of non-white-space characters on a line, the cursor will jump to that beginning (either forwards or backwards). If the cursor is already at that position, it will jump to the true beginning of the line.

set smooth

Deprecated option since it has become the default setting. When needed, use **unset jumpyscrolling** instead.

set softwrap

Enable soft line wrapping for easier viewing of very long lines.

set speller *program*

Use the given *program* to do spell checking and correcting, instead of the built-in corrector that calls **spell**.

set statuscolor *fgcolor,bgcolor*

Specify the color combination to use for the status bar. See **set titlecolor** for more details.

set stripecolor *fgcolor,bgcolor*

Specify the color combination to use for the vertical guiding stripe. See **set titlecolor** for more details.

set suspend

Allow **nano** to be suspended.

set tabsize *number*

Use a tab size of *number* columns. The value of *number* must be greater than 0. The default value is **8**.

set tabstospaces

Convert typed tabs to spaces.

set tempfile

Save automatically on exit, don't prompt.

set titlecolor *fgcolor,bgcolor*

Specify the color combination to use for the title bar. Valid names for the foreground and background colors are: **white**, **black**, **blue**, **green**, **red**, **cyan**, **yellow**, **magenta**, and **normal** -- where **normal** means the default foreground or background color. The name of the foreground color may be prefixed with **bright**. And either "*fgcolor*" or "*bgcolor*" may be left out.

set trimblanks

Remove trailing whitespace from wrapped lines when automatic hard-wrapping occurs or when text is justified.

set unix

Save a file by default in Unix format. This overrides nano's default behavior of saving a file in the format that it had. (This option has no effect when you also use **set noconvert**.)

set view

Disallow file modification: read-only mode. This mode allows the user to open also other files for viewing, unless **--restricted** is given on the command line.

set whitespace "*characters*"

Set the two characters used to indicate the presence of tabs and spaces. They must be single-column characters. The default pair for a UTF-8 locale is "»", and for other locales ">".

set wordbounds

Detect word boundaries differently by treating punctuation characters as parts of words.

set wordchars "*characters*"

Specify which other characters (besides the normal alphanumeric ones) should be considered as parts of words. This overrides the option **wordbounds**.

set zap

Let an unmodified Backspace or Delete erase the marked region (instead of a single character, and without affecting the cutbuffer).

SYNTAX HIGHLIGHTING

Coloring the different syntactic elements of a file is done via regular expressions (see the **color** command below). This is inherently imperfect, because regular expressions are not powerful enough to fully parse a file. Nevertheless, regular expressions can do a lot and are easy to make, so they are a good fit for a small editor like **nano**.

All regular expressions in **nano** are extended regular expressions (ERE). This means that **.**, **?**, *****, **+**, **^**, **\$**, and several other characters are special. The period **.** matches any single character, **?** means the preceding item is optional, ***** means the preceding item may be matched zero or more times, **+** means the preceding item must be matched one or more times, **^** matches the beginning of a line, and **\$** the end, **\<** matches the start of a word, and **\>** the end, and **\s** matches a blank. It also means that lookahead and lookbehind are not possible. A complete explanation can be found in the manual page of GNU **grep**: **man grep**.

For each kind of file a separate syntax can be defined via the following commands:

syntax *name* ["*fileregex*" ...]

Start the definition of a syntax with this *name*. All subsequent **color** and other such commands will be added to this syntax, until a new **syntax** command is encountered.

When **nano** is run, this syntax will be automatically activated if the current filename matches the extended regular expression *fileregex*. Or the syntax can be explicitly activated by using the **-Y** or **--syntax** command-line option followed by the *name*.

The syntax **default** is special: it takes no *fileregex*, and applies to files that don't match any syntax's regexes. The syntax **none** is reserved; specifying it on the command line is the same as not having a syntax at all.

header "*regex*" ...

If from all defined syntaxes no *fileregex* matched, then compare this *regex* (or regexes) against the first line of the current file, to determine whether this syntax should be used for it.

magic "*regex*" ...

If no *fileregex* matched and no **header** regex matched either, then compare this *regex* (or regexes) against the result of querying the **magic** database about the current file, to determine whether this syntax should be used for it. (This functionality only works when **libmagic** is installed on the system and will be silently ignored otherwise.)

linter *program* [*arg* ...]

Use the given *program* to run a syntax check on the current buffer.

comment "*string*"

Use the given *string* for commenting and uncommenting lines. If the string contains a vertical bar or pipe character (`|`), this designates bracket-style comments; for example, `"/*|*/"` for CSS files. The characters before the pipe are prepended to the line and the characters after the pipe are appended at the end of the line. If no pipe character is present, the full string is prepended; for example, `"#"` for Python files. If empty double quotes are specified, the comment/uncomment function is disabled; for example, `""` for JSON. The default value is `"#"`.

color *fgcolor*,*bgcolor* "*regex*" ...

Display all pieces of text that match the extended regular expression *regex* with foreground color *fgcolor* and background color *bgcolor*, at least one of which must be specified. Valid names for foreground and background colors are: **white**, **black**, **blue**, **green**, **red**, **cyan**, **yellow**, **magenta**, and **normal** -- where **normal** means the default foreground or background color. You may use the prefix **bright** to get a stronger color highlight for the foreground. If your terminal supports transparency, not specifying a *bgcolor* tells **nano** to attempt to use a transparent background.

icolor *fgcolor*,*bgcolor* "*regex*" ...

Same as above, except that the matching is case insensitive.

color *fgcolor*,*bgcolor* **start=**"*fromrx*" **end=**"*torx*"

Display all pieces of text whose start matches extended regular expression *fromrx* and whose end matches extended regular expression *torx* with foreground color *fgcolor* and background color *bgcolor*, at least one of which must be specified. This means that, after an initial instance of *fromrx*, all text until the first instance of *torx* will be colored. This allows syntax highlighting to span multiple lines.

icolor *fgcolor*,*bgcolor* **start=**"*fromrx*" **end=**"*torx*"

Same as above, except that the matching is case insensitive.

include "*syntaxfile*"

Read in self-contained color syntaxes from *syntaxfile*. Note that *syntaxfile* may contain only the above commands, from **syntax** to **icolor**.

extendsyntax *name command* [*arg* ...]

Extend the syntax previously defined as *name* with another *command*. This allows adding a new **color**, **icolor**, **header**, **magic**, **comment**, or **linter** command to an already defined syntax -- useful when you want to slightly improve a syntax defined in one of the system-installed files (which normally are not writable).

Note: the **formatter** command has been removed. It was superseded by a more general mechanism: the filtering of buffer or marked text through an external command. Such filtering is done by typing `^R^X` and then preceding your formatter command with the pipe symbol (`|`). It has the added advantage that the operation can be undone.

If you use such a formatting command regularly, you could assign the relevant series of keystrokes to a single key in your nanorc:

```
bind M-F "^R^X|yourformatcommand^M" main
```

(Note that the `^R`, `^X`, and `^M` are each a single, literal control character. You can enter them by preceding each with `M-V`.)

REBINDING KEYS

Key bindings can be changed via the following three commands:

bind *key function menu*

Rebinds the key *key* to a new function named *function* in the context of menu *menu* (or in all menus where the function exists by using **all**).

bind *key "string" menu*

Makes the given *key* produce the given *string* in the given *menu* (or in all menus where the key exists when **all** is used). The *string* can consist of text or commands or a mix of them. (To enter a command into the *string*, precede its keystroke with **M–V.**)

unbind *key menu*

Unbinds the key *key* from the menu named *menu* (or from all menus where it exists by using **all**).

The format of *key* should be one of:

^ followed by a Latin letter, by one of several ASCII characters (@,], \, ^, or _), or by the word "Space". Example: ^C.

M–

followed by any ASCII character except [, or by the word "Space". Example: M–C.

F followed by a numeric value from 1 to 16. Example: F10.

the word "Ins" or the word "Del".

Valid *function* names to be bound are:

help

Invokes the help viewer.

cancel

Cancels the current command.

exit

Exits from the program (or from the help viewer or the file browser).

writeout

Writes the current buffer to disk, asking for a name.

savefile

Writes the current file to disk without prompting.

insert

Inserts a file into the current buffer (at the current cursor position), or into a new buffer when option **multibuffer** is set.

whereis

Starts a forward search for text in the current buffer -- or for filenames matching a string in the current list in the file browser.

wherewas

Starts a backward search for text in the current buffer -- or for filenames matching a string in the current list in the file browser.

findprevious

Searches the next occurrence in the backward direction.

findnext

Searches the next occurrence in the forward direction.

replace

Interactively replaces text within the current buffer.

cut

Cuts and stores the current line (or the marked region).

copy

Copies the current line (or the marked region) without deleting it.

paste

Pastes the currently stored text into the current buffer at the current cursor position.

zap

Throws away the current line (or the marked region). (This function is bound by default to <Meta+Delete>.)

chopwordleft

Deletes from the cursor position to the beginning of the preceding word. (This function is bound by default to <Shift+Ctrl+Delete>. If your terminal produces **^H** for <Ctrl+Backspace>, you can make <Ctrl+Backspace> delete the word to the left of the cursor by rebinding **^H** to this function.)

chopwordright

Deletes from the cursor position to the beginning of the next word. (This function is bound by default to <Ctrl+Delete>.)

cutrestoffile

Cuts all text from the cursor position till the end of the buffer.

mark

Sets the mark at the current position, to start selecting text. Or, when it is set, unsets the mark.

curpos

Shows the current cursor position: the line, column, and character positions.

wordcount

Counts the number of words, lines and characters in the current buffer.

speller

Invokes a spell-checking program, either the default one, or the one defined by **--speller** or **set speller**.

linter

Invokes a syntax-checking program (if the active syntax defines one).

justify

Justifies the current paragraph. A paragraph is a group of contiguous lines that, apart from possibly the first line, all have the same indentation. The beginning of a paragraph is detected by either this lone line with a differing indentation or by a preceding blank line.

fulljustify

Justifies the entire current buffer.

indent

Indents (shifts to the right) the currently marked text.

unindent

Unindents (shifts to the left) the currently marked text.

comment

Comments or uncomments the current line or marked lines, using the comment style specified in the active syntax.

complete

Completes the fragment before the cursor to a full word found elsewhere in the current buffer.

left

Goes left one position (in the editor or browser).

right

Goes right one position (in the editor or browser).

up

Goes one line up (in the editor or browser).

down

Goes one line down (in the editor or browser).

scrollup

Scrolls the viewport up one row (meaning that the text slides down) while keeping the cursor in the same text position, if possible.

scrolldown

Scrolls the viewport down one row (meaning that the text slides up) while keeping the cursor in the same text position, if possible.

prevword

Moves the cursor to the beginning of the previous word.

nextword

Moves the cursor to the beginning of the next word.

home

Moves the cursor to the beginning of the current line.

end

Moves the cursor to the end of the current line.

beginpara

Moves the cursor to the beginning of the current paragraph.

endpara

Moves the cursor to the end of the current paragraph.

prevblock

Moves the cursor to the beginning of the current or preceding block of text. (Blocks are separated by one or more blank lines.)

nextblock

Moves the cursor to the beginning of the next block of text.

pageup

Goes up one screenful.

pagedown

Goes down one screenful.

firstline

Goes to the first line of the file.

lastline

Goes to the last line of the file.

gotoline

Goes to a specific line (and column if specified). Negative numbers count from the end of the file (and end of the line).

findbracket

Moves the cursor to the bracket (brace, parenthesis, etc.) that matches (pairs) with the one under the cursor.

prevbuf

Switches to editing/viewing the previous buffer when multiple buffers are open.

nextbuf

Switches to editing/viewing the next buffer when multiple buffers are open.

verbatim

Inserts the next keystroke verbatim into the file.

tab

Inserts a tab at the current cursor location.

enter

Inserts a new line below the current one.

delete

Deletes the character under the cursor.

backspace

Deletes the character before the cursor.

recordmacro

Starts the recording of keystrokes -- the keystrokes are stored as a macro. When already recording, the recording is stopped.

runmacro

Replays the keystrokes of the last recorded macro.

undo

Undoes the last performed text action (add text, delete text, etc).

redo

Redoes the last undone action (i.e., it undoes an undo).

refresh

Refreshes the screen.

suspend

Suspends the editor (if the suspending function is enabled, see the "suspendenable" entry below).

casesens

Toggles whether searching/replacing ignores or respects the case of the given characters.

regexp

Toggles whether searching/replacing uses literal strings or regular expressions.

backwards

Toggles whether searching/replacing goes forward or backward.

older

Retrieves the previous (earlier) entry at a prompt.

newer

Retrieves the next (later) entry at a prompt.

flipreplace

Toggles between searching for something and replacing something.

flipgoto

Toggles between searching for text and targeting a line number.

flipexecute

Toggles between inserting a file and executing a command.

flippipe

When executing a command, toggles whether the current buffer (or marked region) is piped to the command.

flipnewbuffer

Toggles between inserting into the current buffer and into a new empty buffer.

flipconvert

When reading in a file, toggles between converting and not converting it from DOS/Mac format. Converting is the default.

dosformat

When writing a file, switches to writing a DOS format (CR/LF).

macformat

When writing a file, switches to writing a Mac format.

append

When writing a file, appends to the end instead of overwriting.

prepend

When writing a file, 'prepends' (writes at the beginning) instead of overwriting.

backup

When writing a file, creates a backup of the current file.

discardbuffer

When about to write a file, discard the current buffer without saving. (This function is bound by default only when option **---tempfile** is in effect.)

browser

Starts the file browser, allowing to select a file from a list.

gotodir

Goes to a directory to be specified, allowing to browse anywhere in the filesystem.

firstfile

Goes to the first file when using the file browser (reading or writing files).

lastfile

Goes to the last file when using the file browser (reading or writing files).

nohelp

Toggles the presence of the two-line list of key bindings at the bottom of the screen.

constantshow

Toggles the constant display of the current line, column, and character positions.

softwrap

Toggles the displaying of overlong lines on multiple screen lines.

linenumbers

Toggles the display of line numbers in front of the text.

whitespacedisplay

Toggles the showing of whitespace.

nosyntax

Toggles syntax highlighting.

smarthome

Toggles the smartness of the Home key.

autoindent

Toggles whether a newly created line will contain the same amount of leading whitespace as the preceding line -- or as the next line if the preceding line is the beginning of a paragraph.

cutfromcursor

Toggles whether cutting text will cut the whole line or just from the current cursor position to the end of the line.

nowrap

Toggles whether long lines will be hard-wrapped to the next line.

tabstospaces

Toggles whether typed tabs will be converted to spaces.

mouse

Toggles mouse support.

suspendenable

Toggles whether the suspend sequence (normally `^Z`) will suspend the editor window.

Valid *menu* sections are:

main

The main editor window where text is entered and edited.

search

The search menu (AKA *whereis*).

replace

The 'search to replace' menu.

replacewith

The 'replace with' menu, which comes up after 'search to replace'.

yesno

The 'yesno' menu, where the Yes/No/All/Cancel question is asked.

gotoline

The 'goto line (and column)' menu.

writeout

The 'write file' menu.

insert

The 'insert file' menu.

extcmd

The menu for inserting output from an external command, reached from the insert menu.

help

The help-viewer menu.

spell

The interactive spell checker Yes/no menu.

linter

The linter menu.

browser

The file browser for inserting or writing a file.

whereisfile

The 'search for a file' menu in the file browser.

gotodir

The 'go to directory' menu in the file browser.

all

A special name that encompasses all menus. For **bind** it means all menus where the specified *function* exists; for **unbind** it means all menus where the specified *key* exists.

FILES

/etc/nanorc

System-wide configuration file.

~/.nanorc or *\$XDG_CONFIG_HOME/nano/nanorc* or *~/.config/nano/nanorc*

Per-user configuration file.

SEE ALSO

nano(1)