



Red Hat Enterprise Linux Release 9.2 Manual Pages on 'visudo.8' command

\$ man visudo.8

VISUDO(8) BSD System Manager's Manual VISUDO(8)

NAME

visudo ? edit the sudoers file

SYNOPSIS

visudo [-chqsV] [[-f] sudoers]

DESCRIPTION

visudo edits the sudoers file in a safe fashion, analogous to vipw(8).

visudo locks the sudoers file against multiple simultaneous edits, per-

forms basic validity checks, and checks for syntax errors before in-

stalling the edited file. If the sudoers file is currently being edited

you will receive a message to try again later.

visudo parses the sudoers file after editing and will not save the

changes if there is a syntax error. Upon finding an error, visudo will

print a message stating the line number(s) where the error occurred and

the user will receive the ?What now?? prompt. At this point the user may

enter ?e? to re-edit the sudoers file, ?x? to exit without saving the

changes, or ?Q? to quit and save changes. The ?Q? option should be used

with extreme caution because if visudo believes there to be a syntax er-

ror, so will sudo and no one will be able to run sudo again until the er-

ror is fixed. If ?e? is typed to edit the sudoers file after a syntax

error has been detected, the cursor will be placed on the line where the

error occurred (if the editor supports this feature).

There are two sudoers settings that determine which editor visudo will

run.

editor A colon (?:?) separated list of editors allowed to be used with visudo. visudo will choose the editor that matches the user's SUDO_EDITOR, VISUAL or EDITOR environment variable if possible, or the first editor in the list that exists and is executable.

Note that sudo does not preserve the SUDO_EDITOR, VISUAL or EDITOR environment variables unless they are present in the env_keep list or the env_reset option is disabled in the sudoers file. The default editor path is /bin/vi which can be set at compile time via the --with-editor configure option.

env_editor

If set, visudo will use the value of the SUDO_EDITOR, VISUAL or EDITOR environment variables before falling back on the default editor list. Note that visudo is typically run as root so this option may allow a user with visudo privileges to run arbitrary commands as root without logging. An alternative is to place a colon-separated list of ?safe? editors in the editor variable.

visudo will then only use SUDO_EDITOR, VISUAL or EDITOR if they match a value specified in editor. If the env_reset flag is enabled, the SUDO_EDITOR, VISUAL and/or EDITOR environment variables must be present in the env_keep list for the env_editor flag to function when visudo is invoked via sudo.

The default value is on, which can be set at compile time via the --with-env-editor configure option.

The options are as follows:

-c, --check

Enable check-only mode. The existing sudoers file (and any other files it includes) will be checked for syntax errors.

If the path to the sudoers file was not specified, visudo will also check the file owner and mode. A message will be printed to the standard output describing the status of sudoers unless the -q option was specified. If the check completes successfully, visudo will exit with a value of 0.

If an error is encountered, visudo will exit with a value of

1.

-f sudoers, --file=sudoers

Specify an alternate sudoers file location, see below. As of version 1.8.27, the sudoers path can be specified without using the -f option.

-h, --help Display a short help message to the standard output and exit.

-q, --quiet

Enable quiet mode. In this mode details about syntax errors are not printed. This option is only useful when combined with the -c option.

-s, --strict

Enable strict checking of the sudoers file. If an alias is referenced but not actually defined or if there is a cycle in an alias, visudo will consider this a syntax error. Note that it is not possible to differentiate between an alias and a host name or user name that consists solely of uppercase letters, digits, and the underscore (?_?) character.

-V, --version

Print the visudo and sudoers grammar versions and exit.

A sudoers file may be specified instead of the default, /etc/sudoers.

The temporary file used is the specified sudoers file with ?.tmp? appended to it. In check-only mode only, ?-? may be used to indicate that sudoers will be read from the standard input. Because the policy is evaluated in its entirety, it is not sufficient to check an individual sudoers include file for syntax errors.

Debugging and sudoers plugin arguments

visudo versions 1.8.4 and higher support a flexible debugging framework that is configured via Debug lines in the sudo.conf(5) file.

Starting with sudo 1.8.12, visudo will also parse the arguments to the sudoers plugin to override the default sudoers path name, UID, GID and file mode. These arguments, if present, should be listed after the path to the plugin (i.e., after sudoers.so). Multiple arguments may be speci?

fied, separated by white space. For example:

```
Plugin sudoers_policy sudoers.so sudoers_mode=0400
```

The following arguments are supported:

`sudoers_file=pathname`

The `sudoers_file` argument can be used to override the default path to the sudoers file.

`sudoers_uid=uid`

The `sudoers_uid` argument can be used to override the default owner of the sudoers file. It should be specified as a numeric user-ID.

`sudoers_gid=gid`

The `sudoers_gid` argument can be used to override the default group of the sudoers file. It must be specified as a numeric group-ID (not a group name).

`sudoers_mode=mode`

The `sudoers_mode` argument can be used to override the default file mode for the sudoers file. It should be specified as an octal value.

For more information on configuring `sudo.conf(5)`, please refer to its manual.

ENVIRONMENT

The following environment variables may be consulted depending on the value of the `editor` and `env_editor` sudoers settings:

`SUDO_EDITOR` Invoked by visudo as the editor to use

`VISUAL` Used by visudo if `SUDO_EDITOR` is not set

`EDITOR` Used by visudo if neither `SUDO_EDITOR` nor `VISUAL` is set

FILES

`/etc/sudo.conf` Sudo front end configuration

`/etc/sudoers` List of who can run what

`/etc/sudoers.tmp` Default temporary file used by visudo

DIAGNOSTICS

In addition to reporting sudoers syntax errors, visudo may produce the following messages:

sudoers file busy, try again later.

Someone else is currently editing the sudoers file.

/etc/sudoers: Permission denied

You didn't run visudo as root.

you do not exist in the passwd database

Your user-ID does not appear in the system passwd database.

Warning: {User,Runas,Host,Cmnd}_Alias referenced but not defined

Either you are trying to use an undeclared

{User,Runas,Host,Cmnd}_Alias or you have a user or host name listed

that consists solely of uppercase letters, digits, and the under?

score (?_?) character. In the latter case, you can ignore the

warnings (sudo will not complain). The message is prefixed with

the path name of the sudoers file and the line number where the un?

defined alias was used. In -s (strict) mode these are errors, not

warnings.

Warning: unused {User,Runas,Host,Cmnd}_Alias

The specified {User,Runas,Host,Cmnd}_Alias was defined but never

used. The message is prefixed with the path name of the sudoers

file and the line number where the unused alias was defined. You

may wish to comment out or remove the unused alias.

Warning: cycle in {User,Runas,Host,Cmnd}_Alias

The specified {User,Runas,Host,Cmnd}_Alias includes a reference to

itself, either directly or through an alias it includes. The mes?

sage is prefixed with the path name of the sudoers file and the

line number where the cycle was detected. This is only a warning

unless visudo is run in -s (strict) mode as sudo will ignore cycles

when parsing the sudoers file.

unknown defaults entry "name"

The sudoers file contains a Defaults setting not recognized by

visudo.

SEE ALSO

vi(1), sudo.conf(5), sudoers(5), sudo(8), vipw(8)

AUTHORS

Many people have worked on sudo over the years; this version consists of code written primarily by:

Todd C. Miller

See the CONTRIBUTORS file in the sudo distribution

(<https://www.sudo.ws/contributors.html>) for an exhaustive list of people

who have contributed to sudo.

CAVEATS

There is no easy way to prevent a user from gaining a root shell if the editor used by visudo allows shell escapes.

BUGS

If you feel you have found a bug in visudo, please submit a bug report at <https://bugzilla.sudo.ws/>

SUPPORT

Limited free support is available via the sudo-users mailing list, see <https://www.sudo.ws/mailman/listinfo/sudo-users> to subscribe or search the archives.

DISCLAIMER

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