NAME

visudo - edit the sudoers file

SYNOPSIS

visudo [**-chqsV**] [**-f** *sudoers*] [**-x** *output_file*]

DESCRIPTION

visudo edits the *sudoers* file in a safe fashion, analogous to vipw(8). **visudo** locks the *sudoers* file against multiple simultaneous edits, provides basic sanity checks, and checks for parse errors. If the *sudoers* file is currently being edited you will receive a message to try again later.

There is a hard-coded list of one or more editors that **visudo** will use set at compile-time that may be overridden via the *editor sudoers* Default variable. This list defaults to vi. Normally, **visudo** does not honor the VISUAL or EDITOR environment variables unless they contain an editor in the aforementioned editors list. However, if **visudo** is configured with the --with-env-editor option or the *env_editor* Default variable is set in *sudoers*, **visudo** will use any the editor defines by VISUAL or EDITOR. Note that this can be a security hole since it allows the user to execute any program they wish simply by setting VISUAL or EDITOR.

visudo parses the *sudoers* file after the edit 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 care because if **visudo** believes there to be a parse error, so will **sudo** and no one will be able to run **sudo** again until the error is fixed. If 'e' is typed to edit the *sudoers* file after a parse error has been detected, the cursor will be placed on the line where the error occurred (if the editor supports this feature).

The options are as follows:

-c, **--check**   Enable *check-only* mode. The existing *sudoers* file will be checked for syntax errors, 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. With this option, **visudo** will edit (or check) the *sudoers* file of your choice, instead of the default, */etc/sudoers*. The lock file used is the specified *sudoers* file with ".tmp" appended to it. In *check-only* mode only, the argument to **-f** may be '-', indicating that *sudoers* will be read from the standard input.

-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 used before it is defined, **visudo** will consider this a parse 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.

-x *output_file*, **--export**=*output_file*
Export a *sudoers* in JSON format and write it to *output_file*. If *output_file* is '-', the exported *sudoers* policy will be written to the standard output. By default, */etc/sudoers* (and any files it includes) will be exported. The **-f** option can be used to specify a different *sudoers* file to export. The exported format is intended to be easier for third-party applications to parse than the traditional *sudoers* format. The various values have explicit types which removes much of the ambiguity of the *sudoers* format.

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 specified, 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:

VISUAL   Invoked by **visudo** as the editor to use

EDITOR   Used by **visudo** if VISUAL is not set

FILES

/etc/sudo.conf	Sudo front end configuration
/etc/sudoers	List of who can run what
/etc/sudoers.tmp	Lock file for visudo

DIAGNOSTICS

sudoers file busy, try again later.

> Someone else is currently editing the *sudoers* file.

/etc/sudoers.tmp: Permission denied

> You didn't run **visudo** as root.

Can't find you in the passwd database

> Your user ID does not appear in the system passwd file.

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 underscore ('_') character. In the latter case, you can ignore the warnings (**sudo** will not complain). 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. 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. This is only a warning by default as **sudo** will ignore cycles when parsing the *sudoers* file.

visudo: /etc/sudoers: input and output files must be different
>   The **-x** flag was used and the specified *output_file* has the same path name as the *sudoers* file to export.

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.

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