

NAME

mutt_dotlock – Lock mail spool files.

SYNOPSIS

mutt_dotlock [-t|-f|-u|-d] [-p] [-r *retries*] *file*

DESCRIPTION

mutt_dotlock implements the traditional mail spool file locking method: To lock *file*, a file named *file.lock* is created. The program operates with group mail privileges if necessary.

OPTIONS

- t Just try. **mutt_dotlock** won't actually lock a file, but inform the invoking process if it's at all possible to lock *file*.
- f Force the lock. If another process holds a lock on *file* longer than a certain amount of time, **mutt_dotlock** will break that lock by removing the lockfile.
- u Unlock. **mutt_dotlock** will remove *file.lock*.
- d Delete. **mutt_dotlock** will lock *file*, remove it if it has length 0, and afterwards remove *file.lock*.
- p Use privileges. If given this option, **mutt_dotlock** will operate with group mail privileges when creating and deleting lock files.
- r *retries* This command line option tells **mutt_dotlock** to try locking *retries* times before giving up or (if invoked with the -f command line option) break a lock. The default value is 5. **mutt_dotlock** waits one second between successive locking attempts.

FILES

file.lock
The lock file **mutt_dotlock** generates.

SEE ALSO

fcntl(2), **flock(2)**, **lockfile(1)**, **mutt(1)**

DIAGNOSTICS

mutt_dotlock gives all diagnostics in its return values:

0 – DL_EX_OK

The program was successful.

1 – DL_EX_ERROR

An unspecified error such as bad command line parameters, lack of system memory and the like has occurred.

3 – DL_EX_EXIST

The user wants to lock a file which has been locked by another process already. If **mutt_dotlock** is invoked with the -f command line option, **mutt_dotlock** won't generate this error, but break other processes' locks.

4 – DL_EX_NEED_RPIVS

This return value only occurs if **mutt_dotlock** has been invoked with the -t command line option. It means that **mutt_dotlock** will have to use its group mail privileges to lock *file*.

5 – DL_EX_IMPOSSIBLE

This return value only occurs if **mutt_dotlock** has been invoked with the -t command line option. It means that **mutt_dotlock** is unable to lock *file* even with group mail privileges.

NOTES

mutt_dotlock tries to implement an NFS-safe dotlocking method which was borrowed from **lockfile** (1).

If the user can't open *file* for reading with his normal privileges, **mutt_dotlock** will return the **DL_EX_ERROR** exit value to avoid certain attacks against other users' spool files. The code carefully avoids race conditions when checking permissions; for details of all this see the comments in *dotlock.c*.

HISTORY

mutt_dotlock is part of the Mutt mail user agent package. It has been created to avoid running mutt with group mail privileges.

AUTHOR

Thomas Roessler <roessler@does-not-exist.org>