## Rocky Enterprise Linux 9.2 Manual Pages on command 'utime.2'

*$ man utime.2*

UTIME(2)                    Linux Programmer's Manual                    UTIME(2)

NAME

   utime, utimes - change file last access and modification times

SYNOPSIS

   #include <sys/types.h>

   #include <utime.h>

   int utime(const char *filename, const struct utimbuf *times);

   #include <sys/time.h>

   int utimes(const char *filename, const struct timeval times[2]);

DESCRIPTION

   Note: modern applications may prefer to use the interfaces described in

   utimensat(2).

   The utime() system call changes the access and  modification  times  of

   the  inode  specified  by  filename to the actime and modtime fields of

   times respectively.

   If times is NULL, then the access and modification times  of  the  file

   are set to the current time.

   Changing timestamps is permitted when: either the process has appropri?

ate privileges, or the effective user ID equals the user ID of the file, or times is NULL and the process has write permission for the file.

The utimbuf structure is:

```
struct utimbuf {
    time_t actime;      /* access time */
    time_t modtime;     /* modification time */
};
```

The utime() system call allows specification of timestamps with a reso?lution of 1 second.

The utimes() system call is similar, but the times argument refers to an array rather than a structure. The elements of this array are timeval structures, which allow a precision of 1 microsecond for speci?fying timestamps. The timeval structure is:

```
struct timeval {
    long tv_sec;       /* seconds */
    long tv_usec;      /* microseconds */
};
```

times[0] specifies the new access time, and times[1] specifies the new modification time. If times is NULL, then analogously to utime(), the access and modification times of the file are set to the current time.

RETURN VALUE

On success, zero is returned. On error, -1 is returned, and errno is set appropriately.

ERRORS

EACCES Search permission is denied for one of the directories in the path prefix of path (see also path_resolution(7)).

EACCES times is NULL, the caller's effective user ID does not match the owner of the file, the caller does not have write access to the file, and the caller is not privileged (Linux: does not have ei?ther the CAP_DAC_OVERRIDE or the CAP_FOWNER capability).

ENOENT filename does not exist.

EPERM times is not NULL, the caller's effective UID does not match the

owner of the file, and the caller is not privileged (Linux: does

not have the CAP_FOWNER capability).

EROFS  path resides on a read-only filesystem.

CONFORMING TO

utime(): SVr4, POSIX.1-2001.  POSIX.1-2008 marks utime() as obsolete.

utimes(): 4.3BSD, POSIX.1-2001.

NOTES

Linux  does  not allow changing the timestamps on an immutable file, or

setting the timestamps to something other than the current time  on  an

append-only file.

SEE ALSO

chattr(1),  touch(1), futimesat(2), stat(2), utimensat(2), futimens(3),

futimes(3), inode(7)

COLOPHON

This page is part of release 5.10 of the Linux  man-pages  project.   A

description  of  the project, information about reporting bugs, and the

latest   version   of   this   page,   can    be    found    at

https://www.kernel.org/doc/man-pages/.

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