#### **NAME**

time - get time in seconds

# **SYNOPSIS**

#include <time.h>

time\_t time(time\_t \*t);

# **DESCRIPTION**

time() returns the time as the number of seconds since the Epoch, 1970-01-01 00:00:00 +0000 (UTC).

If t is non-NULL, the return value is also stored in the memory pointed to by t.

# **RETURN VALUE**

On success, the value of time in seconds since the Epoch is returned. On error,  $((time_t) - 1)$  is returned, and *errno* is set appropriately.

#### **ERRORS**

#### **EFAULT**

t points outside your accessible address space.

# **CONFORMING TO**

SVr4, 4.3BSD, C89, C99, POSIX.1-2001. POSIX does not specify any error conditions.

# **NOTES**

POSIX.1 defines *seconds since the Epoch* using a formula that approximates the number of seconds between a specified time and the Epoch. This formula takes account of the facts that all years that are evenly divisible by 4 are leap years, but years that are evenly divisible by 100 are not leap years unless they are also evenly divisible by 400, in which case they are leap years. This value is not the same as the actual number of seconds between the time and the Epoch, because of leap seconds and because system clocks are not required to be synchronized to a standard reference. The intention is that the interpretation of seconds since the Epoch values be consistent; see POSIX.1-2008 Rationale A.4.15 for further rationale.

# **SEE ALSO**

date(1), gettimeofday(2), ctime(3), ftime(3), time(7)

# **COLOPHON**

This page is part of release 3.53 of the Linux *man-pages* project. A description of the project, and information about reporting bugs, can be found at http://www.kernel.org/doc/man-pages/.

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