



**Full credit is given to the above companies including the Operating System (OS) that this PDF file was generated!**

*Rocky Enterprise Linux 9.2 Manual Pages on command 'usleep.3'*

\$ man usleep.3

## USLEEP(3)

Linux Programmer's Manual

## USLEEP(3)

NAME

`usleep` - suspend execution for microsecond intervals

## SYNOPSIS

```
#include <unistd.h>
```

```
int usleep(useconds t usec);
```

Feature Test Macro Requirements for glibc (see `feature_test_macros(7)`):

usleep():

Since glibc 2.12:

( XOPEN SOURCE >= 500) && !( POSIX C SOURCE >= 200809L)

/\* Glibc since 2.19: \*/ DEFAULT\_SOURCE

|| /\* Glibc versions <= 2.19: \*/ BSD SOURCE

Before glibc 2.12:

BSD SOURCE || XOPEN SOURCE >= 500

## DESCRIPTION

The `useeep()` function suspends execution of the calling thread for (at least) usec microseconds.

croseconds. The sleep may be lengthened slightly by any system activity or by the time spent processing the call or by the granularity of system timers.

## RETURN VALUE

The `usleep()` function returns 0 on success. On error, -1 is returned, with `errno` set to indicate the cause of the error.

## ERRORS

**EINTR** Interrupted by a signal; see `signal(7)`.

EINVAL usec is greater than or equal to 1000000. (On systems where that is considered an error.)

## ATTRIBUTES

For an explanation of the terms used in this section, see attributes(7).

??

?Interface ? Attribute ? Value ?

??

?usleep() ? Thread safety ? MT-Safe ?

??

## CONFORMING TO

4.3BSD, POSIX.1-2001. POSIX.1-2001 declares this function obsolete; use nanosleep(2) instead. POSIX.1-2008 removes the specification of usleep().

On the original BSD implementation, and in glibc before version 2.2.2, the return type of this function is void. The POSIX version returns int, and this is also the prototype used since glibc 2.2.2.

Only the EINVAL error return is documented by SUSv2 and POSIX.1-2001.

## NOTES

The type useconds\_t is an unsigned integer type capable of holding integers in the range [0,1000000]. Programs will be more portable if they never mention this type explicitly.

Use

```
#include <unistd.h>
```

...

```
unsigned int usecs;
```

...

```
usleep(usecs);
```

The interaction of this function with the SIGALRM signal, and with other timer functions such as alarm(2), sleep(3), nanosleep(2), setitimer(2), timer\_create(2), timer\_delete(2), timer\_getoverrun(2), timer\_gettime(2), timer\_settime(2), ualarm(3) is unspecified.

## SEE ALSO

alarm(2), getitimer(2), nanosleep(2), select(2), setitimer(2), sleep(3), ualarm(3), time(7)

## COLOPHON

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

Page 2/3

project, information about reporting bugs, and the latest version of this page, can be found at <https://www.kernel.org/doc/man-pages/>.

2017-09-15

USLEEP(3)