NAME

sleep — do nothing, slowly

SYNOPSIS

sleep *delay*[**smhdwy**] . . .

DESCRIPTION

Sleep for the time(s) specified. Each *delay* is a floating-point amount of seconds, optionally suffixed with one of the following cumulative multipliers:

s(econds)	**1**
m(inutes)	**60**
h(hours)	**60**
d(ays)	**24**
w(eeks)	**7**
y(ears)	**365.25 / 7**

EXAMPLES

Wait a half-second:

sleep *0.5*
sleep *1.388e-4***h**

Wait a year:

sleep *1***y**
sleep *3.1e+7*

Wait infinitely, or until the heat death of the universe:

sleep *INF*
sleep *10e+100***y**

SEE ALSO

nanosleep(2)

STANDARDS

Conforms to IEEE Std 1003.1-2024 (“POSIX.1”), which only allows a single non-negative decimal integer *delay*. Multiple, floating-point *delay*s and **smhd** suffixes are extensions, originating from the GNU system. **wy** suffixes are extensions.

HISTORY

sleep(II) ("delay execution") appeared in Version 2 AT&T UNIX:

```
NAME        sleep -- stop execution for interval
SYNOPSIS    (60ths of a second in r0)
            sys sleep  / sleep = 35.; not in assembler
```

With the **BUGS** noting accuracy up to $\frac{256}{60} = 4.2(6)$ seconds, and the process being also placed on a low-priority queue for the duration of the sleep.

Version 3 AT&T UNIX sleep(II) takes whole seconds, but the precision limitations remain.

Version 4 AT&T UNIX sees full-range sleep(II), and sleep(I) — "suspend execution for an interval", limited to **65536** (16 bits, *unsigned*, but it’s more likely actually **32767**, *int*) seconds (this is noted in the **BUGS**, despite being entirely expected with a 16-bit *r0* on a 16-bit machine).

Version 7 AT&T UNIX replaces sleep(II) with ftime(2) and implements sleep(3), based on alarm(2), pause(2), and longjmp(3), in Standard C Library (libc, –lc), but leaves **sleep** unchanged.

Version 32V AT&T UNIX just blindly updates the **BUGS** to say that the max is **2147483647** seconds. Considering this is now 68 *years*, rather than the 18ish hours (or, indeed, 9ish, as the case may be), this raises question about the fore-seen use-cases.

This **sleep** implementation persists into AT&T UNIX and the BSD (but Version 3 AT&T UNIX and 4.2BSD cool it on the `longjmp`(3)s in `sleep`(3)), and is standardised verbatim in X/Open Portability Guide Issue 2 ("XPG2").