

**NAME**

**timeout** - run a command with a time limit

**SYNOPSIS**

**timeout** [--signal *sig* | -s *sig*] [--preserve-status] [--kill-after *time* | -k *time*] [--foreground] *duration*  
*command* [*args* ...]

**DESCRIPTION**

**timeout** starts the *command* with its *args*. If the *command* is still running after *duration*, it is killed. By default, SIGTERM is sent. The special *duration*, zero, signifies no limit. Therefore a signal is never sent if *duration* is 0.

The options are as follows:

**--preserve-status**

Exit with the same status as *command*, even if it times out and is killed.

**--foreground**

Do not propagate timeout to the children of *command*.

**-s sig, --signal sig**

Specify the signal to send on timeout. By default, SIGTERM is sent.

**-k time, --kill-after time**

Send a SIGKILL signal if *command* is still running after *time* after the first signal was sent.

**DURATION FORMAT**

*duration* and *time* are non-negative integer or real (decimal) numbers, with an optional unit-specifying suffix. Values without an explicit unit are interpreted as seconds.

Supported unit symbols are:

**s** seconds  
**m** minutes  
**h** hours  
**d** days

**EXIT STATUS**

If the timeout was not reached, the exit status of *command* is returned.

If the timeout was reached and **--preserve-status** is set, the exit status of *command* is returned. If

**--preserve-status** is not set, an exit status of 124 is returned.

If *command* exits after receiving a signal, the exit status returned is the signal number plus 128.

If *command* refers to a non-existing program, the exit status returned is 127.

If *command* is an otherwise invalid program, the exit status returned is 126.

If an invalid parameter is passed to **-s** or **-k**, the exit status returned is 125.

## EXAMPLES

Run `sleep(1)` with a time limit of 4 seconds. Since the command completes in 2 seconds, the exit status is 0:

```
$ timeout 4 sleep 2
$ echo $?
0
```

Run `sleep(1)` for 4 seconds and terminate process after 2 seconds. 124 is returned since no **--preserve-status** is used:

```
$ timeout 2 sleep 4
$ echo $?
124
```

Same as above but preserving status. Exit status is 128 + signal number (15 for *SIGTERM*):

```
$ timeout --preserve-status 2 sleep 4
$ echo $?
143
```

Same as above but sending *SIGALRM* (signal number 14) instead of *SIGTERM*:

```
$ timeout --preserve-status -s SIGALRM 2 sleep 4
$ echo $?
142
```

Try to `fetch(1)` the PDF version of the FreeBSD Handbook. Send a *SIGTERM* signal after 1 minute and send a *SIGKILL* signal 5 seconds later if the process refuses to stop:

```
$ timeout -k 5s 1m fetch \  
> https://download.freebsd.org/ftp/doc/en/books/handbook/book.pdf
```

**SEE ALSO**

kill(1), nohup(1), signal(3), daemon(8)

**STANDARDS**

The **timeout** utility is compliant with the IEEE Std 1003.1-2024 ("POSIX.1") specification.

**HISTORY**

The **timeout** command first appeared in FreeBSD 10.3.

**AUTHORS**

Baptiste Daroussin <*bapt@FreeBSD.org*> and  
Vsevolod Stakhov <*vsevolod@FreeBSD.org*>