



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

**C:\>man timerclear.3**

TIMERADD(3)                      Linux Programmer's Manual                      TIMERADD(3)

### NAME

timeradd, timersub, timercmp, timerclear, timerisset - timeval operations

### SYNOPSIS

```
#include <sys/time.h>

void timeradd(struct timeval *a, struct timeval *b,
              struct timeval *res);

void timersub(struct timeval *a, struct timeval *b,
              struct timeval *res);

void timerclear(struct timeval *tvp);

int timerisset(struct timeval *tvp);

int timercmp(struct timeval *a, struct timeval *b, CMP);
```

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

All functions shown above:

Since glibc 2.19:

`_DEFAULT_SOURCE`

Glibc 2.19 and earlier:

`_BSD_SOURCE`

### DESCRIPTION

The macros are provided to operate on timeval structures, defined in `<sys/time.h>`

as:

```
struct timeval {
```

```
time_t    tv_sec;    /* seconds */
suseconds_t tv_usec; /* microseconds */
};
```

timeradd() adds the time values in a and b, and places the sum in the timeval pointed to by res. The result is normalized such that res->tv\_usec has a value in the range 0 to 999,999.

timersub() subtracts the time value in b from the time value in a, and places the result in the timeval pointed to by res. The result is normalized such that res->tv\_usec has a value in the range 0 to 999,999.

timerclear() zeros out the timeval structure pointed to by tvp, so that it represents the Epoch: 1970-01-01 00:00:00 +0000 (UTC).

timerisset() returns true (nonzero) if either field of the timeval structure pointed to by tvp contains a nonzero value.

timercmp() compares the timer values in a and b using the comparison operator CMP, and returns true (nonzero) or false (0) depending on the result of the comparison.

Some systems (but not Linux/glibc), have a broken timercmp() implementation, in which CMP of >=, <=, and == do not work; portable applications can instead use

```
!timercmp(..., <)
```

```
!timercmp(..., >)
```

```
!timercmp(..., !=)
```

## RETURN VALUE

timerisset() and timercmp() return true (nonzero) or false (0).

## ERRORS

No errors are defined.

## CONFORMING TO

Not in POSIX.1. Present on most BSD derivatives.

## SEE ALSO

gettimeofday(2), time(7)

## COLOPHON

This page is part of release 5.05 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/>.