AIO_SUSPEND(3)

NAME

aio_suspend - wait for asynchronous I/O operation or timeout

SYNOPSIS

```
#include <aio.h>

int aio_suspend(const struct aiocb * const aiocb_list[],

              int nitems, const struct timespec *timeout);
```

Link with -lrt.

DESCRIPTION

The **aio_suspend**() function suspends the calling thread until one of the following occurs:

* One or more of the asynchronous I/O requests in the list aiocb_list has completed.

* A signal is delivered.

* timeout is not NULL and the specified time interval has passed. (For details of the timespec structure, see **nanosleep**(2).)

The nitems argument specifies the number of items in aiocb_list. Each item in the list pointed to by aiocb_list must be either NULL (and then is ignored), or a pointer to a control block on which I/O was initiated using **aio_read**(3), **aio_write**(3), or **lio_listio**(3). (See **aio**(7) for a description of the aiocb structure.)

If **CLOCK_MONOTONIC** is supported, this clock is used to measure the timeout interval (see **clock_gettime**(3)).

RETURN VALUE

If this function returns after completion of one of the I/O requests specified in aiocb_list, 0 is returned. Otherwise, -1 is returned, and errno is set to indicate the error.

ERRORS

EAGAIN The call timed out before any of the indicated operations had completed.

EINTR The call was ended by signal (possibly the completion signal of one of the operations we were waiting for); see **signal**(7).

ENOSYS aio_suspend() is not implemented.

VERSIONS

The **aio_suspend**() function is available since glibc 2.1.

CONFORMING TO

POSIX.1-2001, POSIX.1-2008.

NOTES

One can achieve polling by using a non-NULL timeout that specifies a zero time interval.

If one or more of the asynchronous I/O operations specified in aiocb_list has already completed at the time of the call to **aio_suspend**(), then the call returns immediately.

To determine which I/O operations have completed after a successful return from **aio_suspend**(), use **aio_error**(3) to scan the list of aiocb structures pointed to by aiocb_list.

SEE ALSO

aio_cancel(3), **aio_error**(3), **aio_fsync**(3), **aio_read**(3), **aio_return**(3), **aio_write**(3), **lio_listio**(3), **aio**(7), **time**(7)

COLOPHON

This page is part of release 3.54 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/.

2012-05-08