NAME

aio_waitcomplete - wait for the next completion of an aio request

LIBRARY

Standard C Library (libc, -lc)

SYNOPSIS

#include <aio.h>

ssize t

aio_waitcomplete(struct aiocb **iocbp, struct timespec *timeout);

DESCRIPTION

The **aio_waitcomplete()** system call waits for completion of an asynchronous I/O request. Upon completion, **aio_waitcomplete()** returns the result of the function and sets *iocbp* to point to the structure associated with the original request. If an asynchronous I/O request is completed before **aio_waitcomplete()** is called, it returns immediately with the completed request.

If *timeout* is a non-NULL pointer, it specifies a maximum interval to wait for a asynchronous I/O request to complete. If *timeout* is a NULL pointer, **aio_waitcomplete()** waits indefinitely. To effect a poll, the *timeout* argument should be non-NULL, pointing to a zero-valued timeval structure.

The **aio_waitcomplete()** system call also serves the function of **aio_return()**, thus **aio_return()** should not be called for the control block returned in *iocbp*.

RETURN VALUES

If an asynchronous I/O request has completed, *iocbp* is set to point to the control block passed with the original request, and the status is returned as described in read(2), write(2), or fsync(2). On failure, **aio_waitcomplete()** returns -1, sets iocbp to NULL and sets *errno* to indicate the error condition.

ERRORS

The **aio_waitcomplete()** system call fails if:

[EINVAL] The specified time limit is invalid.

[EAGAIN] The process has not yet called **aio_read()** or **aio_write()**.

[EINTR] A signal was delivered before the timeout expired and before any asynchronous

I/O requests completed.

[EWOULDBLOCK]

[EINPROGRESS] The specified time limit expired before any asynchronous I/O requests completed.

SEE ALSO

aio_cancel(2), aio_error(2), aio_read(2), aio_return(2), aio_suspend(2), aio_write(2), fsync(2), read(2), write(2), aio(4)

STANDARDS

The aio_waitcomplete() system call is a FreeBSD-specific extension.

HISTORY

The aio_waitcomplete() system call first appeared in FreeBSD 4.0.

AUTHORS

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