NAME

aio_cancel − cancel an outstanding asynchronous I/O request

SYNOPSIS

#include <aio.h>

int aio_cancel(int *fd***, struct aiocb ***aiocbp***);**

Link with *−lrt*.

DESCRIPTION

The **aio_cancel**() function attempts to cancel outstanding asynchronous I/O requests for the file descriptor *fd*. If *aiocbp* is NULL, all such requests are canceled. Otherwise, only the request described by the control block pointed to by *aiocbp* is canceled. (See **aio**(7) for a description of the *aiocb* structure.)

Normal asynchronous notification occurs for canceled requests (see **aio**(7) and **sigevent**(7)). The request return status (**aio_return**(3)) is set to −1, and the request error status (**aio_error**(3)) is set to **ECANCELED**. The control block of requests that cannot be canceled is not changed.

If the request could not be canceled, then it will terminate in the usual way after performing the I/O operation. (In this case, **aio_error**(3) will return the status **EINPROGRESSS**.)

If *aiocbp* is not NULL, and *fd* differs from the file descriptor with which the asynchronous operation was initiated, unspecified results occur.

Which operations are cancelable is implementation-defined.

RETURN VALUE

The **aio_cancel**() function returns one of the following values:

AIO_CANCELED
All requests were successfully canceled.

AIO_NOTCANCELED
At least one of the requests specified was not canceled because it was in progress. In this case, one may check the status of individual requests using **aio_error**(3).

AIO_ALLDONE
All requests had already been completed before the call.

−1 An error occurred. The cause of the error can be found by inspecting *errno*.

ERRORS

EBADF
fd is not a valid file descriptor.

ENOSYS
aio_cancel() is not implemented.

VERSIONS

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

ATTRIBUTES

For an explanation of the terms used in this section, see **attributes**(7).

Interface	Attribute	Value
aio_cancel()	Thread safety	MT-Safe

CONFORMING TO

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

EXAMPLE

See **aio**(7).

SEE ALSO

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

COLOPHON

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