

AIO_CANCEL(3)

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

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 **`EINPROGRESS`**.)

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 `aiocancel()` 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 `aierror(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 `aiocancel()` is not implemented.

VERSIONS

The `aiocancel()` function is available since glibc 2.1.

CONFORMING TO

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

EXAMPLE

See `aiocancel(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

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/>.

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