

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 `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.

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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