

**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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