

NAME

`io_cancel` – cancel an outstanding asynchronous I/O operation

SYNOPSIS

```
#include <libaio.h>
```

```
int io_cancel(aio_context_t ctx_id, struct iocb *iocb,  
              struct io_event *result);
```

Link with `-laio`.

DESCRIPTION

`io_cancel()` attempts to cancel an asynchronous I/O operation previously submitted with `io_submit(2)`. `ctx_id` is the AIO context ID of the operation to be canceled. If the AIO context is found, the event will be canceled and then copied into the memory pointed to by `result` without being placed into the completion queue.

RETURN VALUE

On success, `io_cancel()` returns 0. For the failure return, see NOTES.

ERRORS**EAGAIN**

The `iocb` specified was not canceled.

EFAULT

One of the data structures points to invalid data.

EINVAL

The AIO context specified by `ctx_id` is invalid.

ENOSYS

`io_cancel()` is not implemented on this architecture.

VERSIONS

The asynchronous I/O system calls first appeared in Linux 2.5, August 2002.

CONFORMING TO

`io_cancel()` is Linux-specific and should not be used in programs that are intended to be portable.

NOTES

Glibc does not provide a wrapper function for this system call.

The wrapper provided in *libaio* for `io_cancel()` does not follow the usual C library conventions for indicating error: on error it returns a negated error number (the negative of one of the values listed in ERRORS). If the system call is invoked via `syscall(2)`, then the return value follows the usual conventions for indicating an error: `-1`, with `errno` set to a (positive) value that indicates the error.

SEE ALSO

`io_destroy(2)`, `io_getevents(2)`, `io_setup(2)`, `io_submit(2)`

COLOPHON

This page is part of release 3.22 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/>.