NAME

io_cancel − cancel an outstanding asynchronous I/O operation

LIBRARY

Standard C library (*libc*, *−lc*)

Alternatively, Asynchronous I/O library (*libaio*, *−laio*); see NOTES.

SYNOPSIS

```
#include <linux/aio_abi.h>    /* Definition of needed types */
#include <sys/syscall.h>      /* Definition of SYS_* constants */
#include <unistd.h>

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

DESCRIPTION

Note: this page describes the raw Linux system call interface. The wrapper function provided by *libaio* uses a different type for the *ctx_id* argument. See NOTES.

The **io_cancel**() system call attempts to cancel an asynchronous I/O operation previously submitted with **io_submit**(2). The*iocb* ar gument describes the operation to be canceled and the *ctx_id* argument is the AIO context to which the operation was submitted. If the operation is successfully canceled, the event will be 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.

STANDARDS

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

NOTES

You probably want to use the **io_cancel**() wrapper function provided by *libaio*.

Note that the *libaio* wrapper function uses a different type (*io_context_t*) for the *ctx_id* argument. Note also that the *libaio* wrapper does not follow the usual C library conventions for indicating errors: 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), **aio**(7)