



Linux Ubuntu 26.04 Manual Pages on command 'io_cancel.2'

\$ man io_cancel.2

io_cancel(2) System Calls Manual io_cancel(2)

NAME

io_cancel - cancel an outstanding asynchronous I/O operation

LIBRARY

Standard C library (libc, -lc)

Alternatively, Asynchronous I/O library (libaio, -laio); see VERSIONS.

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 VERSIONS.

The io_cancel() system call attempts to cancel an asynchronous I/O operation previously submitted with io_submit(2). The iocb argument 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 VERSIONS.

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

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.

STANDARDS

Linux.

HISTORY

Linux 2.5.

SEE ALSO

io_destroy(2), io_getevents(2), io_setup(2), io_submit(2), aio(7)

Linux man-pages 6.17

2025-05-17

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