

NAME

`io_submit` – submit asynchronous I/O blocks for processing

SYNOPSIS

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

```
int io_submit(aio_context_t ctx_id, long nr, struct iocb **iocbpp);
```

Link with `-laio`.

DESCRIPTION

`io_submit()` queues *nr* I/O request blocks for processing in the AIO context *ctx_id*. *iocbpp* should be an array of *nr* AIO control blocks, which will be submitted to context *ctx_id*.

RETURN VALUE

On success, `io_submit()` returns the number of *iocbs* submitted (which may be 0 if *nr* is zero). For the failure return, see NOTES.

ERRORS**EAGAIN**

Insufficient resources are available to queue any *iocbs*.

EBADF

The file descriptor specified in the first *iocb* is invalid.

EFAULT

One of the data structures points to invalid data.

EINVAL

The *aio_context* specified by *ctx_id* is invalid. *nr* is less than 0. The *iocb* at **iocbpp[0]* is not properly initialized, or the operation specified is invalid for the file descriptor in the *iocb*.

ENOSYS

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

VERSIONS

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

CONFORMING TO

`io_submit()` 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_submit()` 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_cancel(2)`, `io_destroy(2)`, `io_getevents(2)`, `io_setup(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/>.