

NAME

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

SYNOPSIS

```
#include <linux/aio_abi.h> /* Defines needed types */
```

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

Note: There is no glibc wrapper for this system call; see NOTES.

DESCRIPTION

The `io_submit()` system call queues *nr* I/O request blocks for processing in the AIO context *ctx_id*. The *iocbpp* argument 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.

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. You could invoke it using [syscall\(2\)](#). But instead, you probably want to use the `io_submit()` 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_cancel\(2\)](#), [io_destroy\(2\)](#), [io_getevents\(2\)](#), [io_setup\(2\)](#), [aio\(7\)](#)

COLOPHON

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