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## **Red Hat Enterprise Linux Release 9.2 Manual Pages on 'aio\_suspend.3p' command**

**\$ man aio\_suspend.3p**

AIO\_SUSPEND(3P)      POSIX Programmer's Manual      AIO\_SUSPEND(3P)

### PROLOG

This manual page is part of the POSIX Programmer's Manual. The Linux implementation of this interface may differ (consult the corresponding Linux manual page for details of Linux behavior), or the interface may not be implemented on Linux.

### NAME

aio\_suspend ? wait for an asynchronous I/O request

### SYNOPSIS

```
#include <aio.h>

int aio_suspend(const struct aiocb *const list[], int nent,
               const struct timespec *timeout);
```

### DESCRIPTION

The `aio_suspend()` function shall suspend the calling thread until at least one of the asynchronous I/O operations referenced by the list argument has completed, until a signal interrupts the function, or, if `timeout` is not NULL, until the time interval specified by `timeout` has passed. If any of the `aiocb` structures in the list correspond to completed asynchronous I/O operations (that is, the error status for the operation is not equal to `[EINPROGRESS]`) at the time of the call, the function shall return without suspending the calling thread. The list argument is an array of pointers to asynchronous I/O control blocks. The `nent` argument indicates the number of elements in the array. Each

aiocb structure pointed to has been used in initiating an asynchronous I/O request via `aio_read()`, `aio_write()`, or `lio_listio()`. This array may contain null pointers, which are ignored. If this array contains pointers that refer to aiocb structures that have not been used in submitting asynchronous I/O, the effect is undefined.

If the time interval indicated in the `timespec` structure pointed to by `timeout` passes before any of the I/O operations referenced by `list` are completed, then `aio_suspend()` shall return with an error. If the `Monotonic Clock` option is supported, the clock that shall be used to measure this time interval shall be the `CLOCK_MONOTONIC` clock.

## RETURN VALUE

If the `aio_suspend()` function returns after one or more asynchronous I/O operations have completed, the function shall return zero. Otherwise, the function shall return a value of -1 and set `errno` to indicate the error.

The application may determine which asynchronous I/O completed by scanning the associated error and return status using `aio_error()` and `aio_return()`, respectively.

## ERRORS

The `aio_suspend()` function shall fail if:

**EAGAIN** No asynchronous I/O indicated in the list referenced by `list` completed in the time interval indicated by `timeout`.

**EINTR** A signal interrupted the `aio_suspend()` function. Note that, since each asynchronous I/O operation may possibly provoke a signal when it completes, this error return may be caused by the completion of one (or more) of the very I/O operations being awaited.

The following sections are informative.

## EXAMPLES

None.

## APPLICATION USAGE

None.

## RATIONALE

None.

## FUTURE DIRECTIONS

None.

## SEE ALSO

`aio_read()`, `aio_write()`, `lio_listio()`

The Base Definitions volume of POSIX.1-2017, `<aio.h>`

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