Red Hat Enterprise Linux Release 9.2 Manual Pages on 'aio_init.3' command

$ man aio_init.3

AIO_INIT(3)   Linux Programmer's Manual   AIO_INIT(3)

NAME

   aio_init - asynchronous I/O initialization

SYNOPSIS

   #define _GNU_SOURCE   /* See feature_test_macros(7) */

   #include <aio.h>

   void aio_init(const struct aioinit *init);

   Link with -lrt.

DESCRIPTION

   The GNU-specific aio_init() function allows the caller to provide tun?

   ing hints to the glibc POSIX AIO implementation. Use of this function

   is optional, but to be effective, it must be called before employing

   any other functions in the POSIX AIO API.

   The tuning information is provided in the buffer pointed to by the ar?

   gument init. This buffer is a structure of the following form:

     struct aioinit {

       int aio_threads;   /* Maximum number of threads */

       int aio_num;   /* Number of expected simultaneous

                   requests */

       int aio_locks;   /* Not used */

       int aio_usedba;   /* Not used */

       int aio_debug;   /* Not used */

       int aio_numusers; /* Not used */

```
        int aio_idle_time;  /* Number of seconds before idle thread

                    terminates (since glibc 2.2) */

        int aio_reserved;

    };
```

The following fields are used in the aioinit structure:

aio_threads

This field specifies the maximum number of worker threads that

may be used by the implementation. If the number of outstanding

I/O operations exceeds this limit, then excess operations will

be queued until a worker thread becomes free. If this field is

specified with a value less than 1, the value 1 is used. The

default value is 20.

aio_num

This field should specify the maximum number of simultaneous I/O

requests that the caller expects to enqueue. If a value less

than 32 is specified for this field, it is rounded up to 32.

The default value is 64.

aio_idle_time

This field specifies the amount of time in seconds that a worker

thread should wait for further requests before terminating, af?

ter having completed a previous request. The default value is

1.

VERSIONS

The aio_init() function is available since glibc 2.1.

CONFORMING TO

This function is a GNU extension.

SEE ALSO

aio(7)

COLOPHON

This page is part of release 5.10 of the Linux man-pages project.   A

description of the project, information about reporting bugs, and the

latest   version   of   this   page,   can   be   found   at

https://www.kernel.org/doc/man-pages/.