NAME

readahead − perform file readahead into page cache

SYNOPSIS

```
#define _GNU_SOURCE
#include <fcntl.h>

ssize_t readahead(int fd, off64_t offset, size_t count);
```

DESCRIPTION

readahead() populates the page cache with data from a file so that subsequent reads from that file will not block on disk I/O. The *fd* argument is a file descriptor identifying the file which is to be read. The *offset* argument specifies the starting point from which data is to be read and *count* specifies the number of bytes to be read. I/O is performed in whole pages, so that *offset* is effectively rounded down to a page boundary and bytes are read up to the next page boundary greater than or equal to *(offset+count)*. **readahead**() does not read beyond the end of the file. **readahead**() blocks until the specified data has been read. The current file offset of the open file referred to by *fd* is left unchanged.

RETURN VALUE

On success, **readahead**() returns 0; on failure, −1 is returned, with *errno* set to indicate the cause of the error.

ERRORS

EBADF

fd is not a valid file descriptor or is not open for reading.

EINVAL

fd does not refer to a file type to which **readahead**() can be applied.

VERSIONS

The **readahead**() system call appeared in Linux 2.4.13; glibc support has been provided since version 2.3.

CONFORMING TO

The **readahead**() system call is Linux-specific, and its use should be avoided in portable applications.

SEE ALSO

lseek(2), **madvise**(2), **mmap**(2), **posix_fadvise**(2), **read**(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/.