

**NAME**

`fflush` - flush a stream

**SYNOPSIS**

```
#include <stdio.h>

int fflush(FILE *stream);
```

**DESCRIPTION**

For output streams, `fflush()` forces a write of all user-space buffered data for the given output or update *stream* via the stream's underlying write function. For input streams, `fflush()` discards any buffered data that has been fetched from the underlying file, but has not been consumed by the application. The open status of the stream is unaffected.

If the *stream* argument is `NULL`, `fflush()` flushes *all* open output streams.

For a nonlocking counterpart, see [unlocked\\_stdio\(3\)](#).

**RETURN VALUE**

Upon successful completion 0 is returned. Otherwise, `EOF` is returned and *errno* is set to indicate the error.

**ERRORS****EBADF**

*Stream* is not an open stream, or is not open for writing.

The function `fflush()` may also fail and set *errno* for any of the errors specified for [write\(2\)](#).

**ATTRIBUTES****Multithreading (see [pthreads\(7\)](#))**

The `fflush()` function is thread-safe.

**CONFORMING TO**

C89, C99, POSIX.1-2001, POSIX.1-2008.

The standards do not specify the behavior for input streams. Most other implementations behave the same as Linux.

**NOTES**

Note that `fflush()` only flushes the user-space buffers provided by the C library. To ensure that the data is physically stored on disk the kernel buffers must be flushed too, for example, with [sync\(2\)](#) or [fsync\(2\)](#).

**SEE ALSO**

[fsync\(2\)](#), [sync\(2\)](#), [write\(2\)](#), [fclose\(3\)](#), [fopen\(3\)](#), [setbuf\(3\)](#), [unlocked\\_stdio\(3\)](#)

**COLOPHON**

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