NAME

__fbufsize, __flbf, __fpending, __fpurge, __freadable, __freading, __fsetlocking, __fwritable, __fwriting, _flushlbf - interfaces to stdio FILE structure

SYNOPSIS

#include <stdio.h>
#include <stdio_ext.h>

size_t __fbufsize(FILE ***_stream_);**
size_t __fpending(FILE ***_stream_);**
int __flbf(FILE ***_stream_);**
int __freadable(FILE ***_stream_);**
int __fwritable(FILE ***_stream_);**
int __freading(FILE ***_stream_);**
int __fwriting(FILE ***_stream_);**
int __fsetlocking(FILE ***_stream_, int** _type_**);**
void _flushlbf(void);
void __fpurge(FILE ***_stream_);**

DESCRIPTION

Solaris introduced routines to allow portable access to the internals of the *FILE* structure, and glibc also implemented these.

The **__fbufsize**() function returns the size of the buffer currently used by the given stream.

The **__fpending**() function returns the number of bytes in the output buffer. For wide-oriented streams the unit is wide characters. This function is undefined on buffers in reading mode, or opened read-only.

The **__flbf**() function returns a nonzero value if the stream is line-buffered, and zero otherwise.

The **__freadable**() function returns a nonzero value if the stream allows reading, and zero otherwise.

The **__fwritable**() function returns a nonzero value if the stream allows writing, and zero otherwise.

The **__freading**() function returns a nonzero value if the stream is read-only, or if the last operation on the stream was a read operation, and zero otherwise.

The **__fwriting**() function returns a nonzero value if the stream is write-only (or append-only), or if the last operation on the stream was a write operation, and zero otherwise.

The **__fsetlocking**() function can be used to select the desired type of locking on the stream. It returns the current type. The*typ e* argument can take the following three values:

FSETLOCKING_INTERNAL

Perform implicit locking around every operation on the given stream (except for the *_unlocked ones). This is the default.

FSETLOCKING_BYCALLER

The caller will take care of the locking (possibly using flockfile(3) in case there is more than one thread), and the stdio routines will not do locking until the state is reset to **FSETLOCKING_INTERNAL**.

FSETLOCKING_QUERY

Don't change the type of locking. (Only return it.)

The **_flushlbf**() function flushes all line-buffered streams. (Presumably so that output to a terminal is forced out, say before reading keyboard input.)

The **__fpurge**() function discards the contents of the stream's buffer.

ATTRIBUTES

Multithreading (see pthreads(7))

The **__fbufsize**(), **__fpending**(), **__fpurge**() and **__fsetlocking**() functions do not lock the stream, so they are not thread-safe.

The **__flbf**(), **__freadable**(), **__freading**(), **__fwritable**(), **__fwriting**() and **_flushlbf**() functions are thread-safe.

SEE ALSO

flockfile(3), fpurge(3)

COLOPHON

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