

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 *type* 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

For an explanation of the terms used in this section, see **attributes(7)**.

Interface	Attribute	Value
<code>__fbufsize()</code> , <code>__fpending()</code> , <code>__fpurge()</code> , <code>__fsetlocking()</code>	Thread safety	MT-Safe race:stream
<code>__flbf()</code> , <code>__freadable()</code> , <code>__freading()</code> , <code>__fwritable()</code> , <code>__fwriting()</code> , <code>_flushlbf()</code>	Thread safety	MT-Safe

SEE ALSO

flockfile(3), **fpurge(3)**

COLOPHON

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