

**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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