

NAME

`fwide` – set and determine the orientation of a FILE stream

SYNOPSIS

```
#include <wchar.h>
```

```
int fwide(FILE *stream, int mode);
```

Feature Test Macro Requirements for glibc (see **feature_test_macros(7)**):

```
fwide():
```

```
_XOPEN_SOURCE >= 500 || _ISOC99_SOURCE ||  
_POSIX_C_SOURCE >= 200112L
```

DESCRIPTION

When *mode* is zero, the **fwide()** function determines the current orientation of *stream*. It returns a positive value if *stream* is wide-character oriented, that is, if wide-character I/O is permitted but char I/O is disallowed. It returns a negative value if *stream* is byte oriented—that is, if char I/O is permitted but wide-character I/O is disallowed. It returns zero if *stream* has no orientation yet; in this case the next I/O operation might change the orientation (to byte oriented if it is a char I/O operation, or to wide-character oriented if it is a wide-character I/O operation).

Once a stream has an orientation, it cannot be changed and persists until the stream is closed.

When *mode* is nonzero, the **fwide()** function first attempts to set *stream*'s orientation (to wide-character oriented if *mode* is greater than 0, or to byte oriented if *mode* is less than 0). It then returns a value denoting the current orientation, as above.

RETURN VALUE

The **fwide()** function returns the stream's orientation, after possibly changing it. A positive return value means wide-character oriented. A negative return value means byte oriented. A return value of zero means undecided.

CONFORMING TO

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

NOTES

Wide-character output to a byte oriented stream can be performed through the **fprintf(3)** function with the **%lc** and **%ls** directives.

Char oriented output to a wide-character oriented stream can be performed through the **fwprintf(3)** function with the **%c** and **%s** directives.

SEE ALSO

fprintf(3), **fwprintf(3)**

COLOPHON

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