

**NAME**

fgetwc, getwc – read a wide character from a FILE stream

**LIBRARY**

Standard C library (*libc*, *-lc*)

**SYNOPSIS**

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

wint_t fgetwc(FILE *stream);
wint_t getwc(FILE *stream);
```

**DESCRIPTION**

The **fgetwc()** function is the wide-character equivalent of the **fgetc(3)** function. It reads a wide character from *stream* and returns it. If the end of stream is reached, or if *ferror(stream)* becomes true, it returns **WEOF**. If a wide-character conversion error occurs, it sets *errno* to **EILSEQ** and returns **WEOF**.

The **getwc()** function or macro functions identically to **fgetwc()**. It may be implemented as a macro, and may evaluate its argument more than once. There is no reason ever to use it.

For nonlocking counterparts, see **unlocked\_stdio(3)**.

**RETURN VALUE**

On success, **fgetwc()** returns the next wide-character from the stream. Otherwise, **WEOF** is returned, and *errno* is set to indicate the error.

**ERRORS**

Apart from the usual ones, there is

**EILSEQ**

The data obtained from the input stream does not form a valid character.

**ATTRIBUTES**

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

| Interface                        | Attribute     | Value   |
|----------------------------------|---------------|---------|
| <b>fgetwc()</b> , <b>getwc()</b> | Thread safety | MT-Safe |

**STANDARDS**

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

**NOTES**

The behavior of **fgetwc()** depends on the **LC\_CTYPE** category of the current locale.

In the absence of additional information passed to the **fopen(3)** call, it is reasonable to expect that **fgetwc()** will actually read a multibyte sequence from the stream and then convert it to a wide character.

**SEE ALSO**

**fgetws(3)**, **fputwc(3)**, **ungetwc(3)**, **unlocked\_stdio(3)**