

NAME

`mbrlen` - determine number of bytes in next multibyte character

SYNOPSIS

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

```
size_t mbrlen(const char *s, size_t n, mbstate_t *ps);
```

DESCRIPTION

The `mbrlen()` function inspects at most n bytes of the multibyte string starting at s and extracts the next complete multibyte character. It updates the shift state $*ps$. If the multibyte character is not the null wide character, it returns the number of bytes that were consumed from s . If the multibyte character is the null wide character, it resets the shift state $*ps$ to the initial state and returns 0.

If the n bytes starting at s do not contain a complete multibyte character, `mbrlen()` returns $(size_t) - 2$. This can happen even if $n \geq MB_CUR_MAX$, if the multibyte string contains redundant shift sequences.

If the multibyte string starting at s contains an invalid multibyte sequence before the next complete character, `mbrlen()` returns $(size_t) - 1$ and sets `errno` to **EILSEQ**. In this case, the effects on $*ps$ are undefined.

If ps is NULL, a static anonymous state known only to the `mbrlen()` function is used instead.

RETURN VALUE

The `mbrlen()` function returns the number of bytes parsed from the multibyte sequence starting at s , if a non-null wide character was recognized. It returns 0, if a null wide character was recognized. It returns $(size_t) - 1$ and sets `errno` to **EILSEQ**, if an invalid multibyte sequence was encountered. It returns $(size_t) - 2$ if it couldn't parse a complete multibyte character, meaning that n should be increased.

ATTRIBUTES

For an explanation of the terms used in this section, see [attributes\(7\)](#).

Interface	Attribute	Value
<code>mbrlen()</code>	Thread safety	MT-Unsafe race:mbrlen/!ps

CONFORMING TO

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

NOTES

The behavior of `mbrlen()` depends on the **LC_CTYPE** category of the current locale.

SEE ALSO

[mbtrowc\(3\)](#)

COLOPHON

This page is part of release 4.10 of the Linux *man-pages* project. A description of the project, information about reporting bugs, and the latest version of this page, can be found at <https://www.kernel.org/doc/man-pages/>.