

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**Multithreading (see `pthread(7)`)**

The `mbrlen()` function is thread-safe with exceptions. It is not thread-safe if called with a NULL ps parameter.

CONFORMING TO

C99.

NOTES

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

SEE ALSO

[mbrtowc\(3\)](#)

COLOPHON

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