NAME

mbrlen − determine number of bytes in next multibyte character

LIBRARY

Standard C library (*libc*, *−lc*)

SYNOPSIS

```
#include <wchar.h>

size_t mbrlen(const char *s[restrict .n], size_t n,
              mbstate_t *restrict 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 >= 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
mbrlen()	Thread safety	MT-Unsafe race:mbrlen/!ps

STANDARDS

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

NOTES

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

SEE ALSO

mbrtowc(3)