### **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  $n \ge MB\_CUR\_MAX$ , 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

## **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**

mbrtowc(3)

## **COLOPHON**

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