



Linux Ubuntu 26.04 Manual Pages on command 'mbsrtowcs.3'

\$ man mbsrtowcs.3

mbsrtowcs(3) Library Functions Manual mbsrtowcs(3)

NAME

mbsrtowcs - convert a multibyte string to a wide-character string (restartable)

LIBRARY

Standard C library (libc, -lc)

SYNOPSIS

```
#include <wchar.h>

size_t mbsrtowcs(size_t dsize;
                 wchar_t dest[restrict dsize],
                 const char **restrict src,
                 size_t dsize, mbstate_t *restrict ps);
```

DESCRIPTION

If `dest` is not NULL, convert the multibyte string `*src` to a wide-character string starting at `dest`. At most `dsize` wide characters are written to `dest`. The shift state `*ps` is updated. The conversion is effectively performed by repeatedly calling `mbrtowc(dest, *src, n, ps)` where `n` is some positive number, as long as this call succeeds, and then incrementing `dest` by one and `*src` by the number of bytes consumed. The conversion can stop for three reasons:

- ? An invalid multibyte sequence has been encountered. In this case, `*src` is left pointing to the invalid multibyte sequence, `(size_t) -1` is returned, and `errno` is set to `EILSEQ`.
- ? `dsize` non-L'\0' wide characters have been stored at `dest`. In this case, `*src` is left pointing to the next multibyte sequence to be converted, and the number of wide characters written to `dest` is returned.

In this case, `*src` is set to `NULL`, and the number of wide characters written to `dest`, excluding the terminating null wide character, is returned.

In both of the above cases, if `ps` is `NULL`, a static anonymous state known only to the `mbsr`?
`towcs()` function is used instead.

The programmer must ensure that there is room for at least `dsiz` wide characters at `dest`.

This function is a restartable version of `mbstowcs(3)`.

The number of wide characters that make up the converted part of the wide-character string, not including the terminating null wide character. If an invalid multibyte sequence was encountered, (size_t)-1 is returned, and errno set to EILSEQ.

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

[illegible]

?	Interface	?	Attribute	?	Value	?
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[illegible]

? mbsrtowcs() ? Thread safety ? MT-Unsafe race:mbsrtowcs/!ps ?

[illegible]

C11, POSIX.1-2008.

POSIX.1-2001, C99.

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

Passing NULL as ps is not multithread safe.

iconv(3), mbrtowc(3), mbsinit(3), mbsnrtowcs(3), mbstowcs(3)