



Red Hat Enterprise Linux Release 9.2 Manual Pages on 'wcsrtombs.3' command

\$ man wcsrtombs.3

WCSRTOMBS(3) Linux Programmer's Manual WCSRTOMBS(3)

NAME

wcsrtombs - convert a wide-character string to a multibyte string

SYNOPSIS

```
#include <wchar.h>

size_t wcsrtombs(char *dest, const wchar_t **src,
                 size_t len, mbstate_t *ps);
```

DESCRIPTION

If `dest` is not `NULL`, the `wcsrtombs()` function converts the wide-character string `*src` to a multibyte string starting at `dest`. At most `len` bytes are written to `dest`. The shift state `*ps` is updated. The conversion is effectively performed by repeatedly calling `wcrtomb(dest, *src, ps)`, as long as this call succeeds, and then incrementing `dest` by the number of bytes written and `*src` by one. The conversion can stop for three reasons:

1. A wide character has been encountered that can not be represented as a multibyte sequence (according to the current locale). In this case, `*src` is left pointing to the invalid wide character, `(size_t) -1` is returned, and `errno` is set to `EILSEQ`.
2. The length limit forces a stop. In this case, `*src` is left pointing to the next wide character to be converted, and the number of bytes written to `dest` is returned.
3. The wide-character string has been completely converted, including

the terminating null wide character (L'\0'), which has the side effect of bringing back *ps to the initial state. In this case, *src is set to NULL, and the number of bytes written to dest, excluding the terminating null byte ('\0'), is returned.

If dest is NULL, len is ignored, and the conversion proceeds as above, except that the converted bytes are not written out to memory, and that no length limit exists.

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

The programmer must ensure that there is room for at least len bytes at dest.

RETURN VALUE

The wcsrtombs() function returns the number of bytes that make up the converted part of multibyte sequence, not including the terminating null byte. If a wide character was encountered which could not be converted, (size_t) -1 is returned, and errno set to EILSEQ.

ATTRIBUTES

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

Interface	Attribute	Value
wcsrtombs()	Thread safety	MT-Unsafe race:wcsrtombs!/ps

CONFORMING TO

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

NOTES

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

Passing NULL as ps is not multithread safe.

SEE ALSO

iconv(3), mbsinit(3), wcrctomb(3), wcsnrtombs(3), wcstombs(3)

COLOPHON

This page is part of release 5.10 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/>.

GNU

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