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

**\$ man wcsrtombs.3p**

WCSRTOMBS(3P)          POSIX Programmer's Manual          WCSRTOMBS(3P)

### PROLOG

This manual page is part of the POSIX Programmer's Manual. The Linux implementation of this interface may differ (consult the corresponding Linux manual page for details of Linux behavior), or the interface may not be implemented on Linux.

### NAME

wcsnrtoombs, wcsrtombs ? convert a wide-character string to a character string (restartable)

### SYNOPSIS

```
#include <wchar.h>

size_t wcsnrtoombs(char *restrict dst, const wchar_t **restrict src,
    size_t nwc, size_t len, mbstate_t *restrict ps);

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

### DESCRIPTION

For `wcsrtombs()`: The functionality described on this reference page is aligned with the ISO C standard. Any conflict between the requirements described here and the ISO C standard is unintentional. This volume of POSIX.1?2017 defers to the ISO C standard.

The `wcsrtombs()` function shall convert a sequence of wide characters from the array indirectly pointed to by `src` into a sequence of corresponding characters, beginning in the conversion state described by the

object pointed to by `ps`. If `dst` is not a null pointer, the converted characters shall then be stored into the array pointed to by `dst`. Conversion continues up to and including a terminating null wide character, which shall also be stored. Conversion shall stop earlier in the following cases:

- \* When a code is reached that does not correspond to a valid character
- \* When the next character would exceed the limit of `len` total bytes to be stored in the array pointed to by `dst` (and `dst` is not a null pointer)

Each conversion shall take place as if by a call to the `wcrtomb()` function.

If `dst` is not a null pointer, the pointer object pointed to by `src` shall be assigned either a null pointer (if conversion stopped due to reaching a terminating null wide character) or the address just past the last wide character converted (if any). If conversion stopped due to reaching a terminating null wide character, the resulting state described shall be the initial conversion state.

If `ps` is a null pointer, the `wcsrtombs()` function shall use its own internal `mbstate_t` object, which is initialized at program start-up to the initial conversion state. Otherwise, the `mbstate_t` object pointed to by `ps` shall be used to completely describe the current conversion state of the associated character sequence.

The `wcsnrtombs()` and `wcsrtombs()` functions need not be thread-safe if called with a NULL `ps` argument.

The `wcsnrtombs()` function shall be equivalent to the `wcsrtombs()` function, except that the conversion is limited to the first `nwc` wide characters.

The `wcsrtombs()` function shall not change the setting of `errno` if successful.

The behavior of these functions shall be affected by the `LC_CTYPE` category of the current locale.

The implementation shall behave as if no function defined in System In-

interfaces volume of POSIX.1?2017 calls these functions.

## RETURN VALUE

If conversion stops because a code is reached that does not correspond to a valid character, an encoding error occurs. In this case, these functions shall store the value of the macro [EILSEQ] in `errno` and return `(size_t)-1`; the conversion state is undefined. Otherwise, these functions shall return the number of bytes in the resulting character sequence, not including the terminating null (if any).

## ERRORS

These functions shall fail if:

**EILSEQ** A wide-character code does not correspond to a valid character.

These functions may fail if:

**EINVAL** `ps` points to an object that contains an invalid conversion state.

The following sections are informative.

## EXAMPLES

None.

## APPLICATION USAGE

None.

## RATIONALE

None.

## FUTURE DIRECTIONS

None.

## SEE ALSO

`mbsinit()`, `wcrtomb()`

The Base Definitions volume of POSIX.1?2017, `<wchar.h>`

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