NAME

wcrtomb, **c16rtomb**, **c32rtomb** - convert a wide-character code to a character (restartable)

LIBRARY

Standard C Library (libc, -lc)

SYNOPSIS

#include <wchar.h>

size_t
wcrtomb(*char * restrict s, wchar_t c, mbstate_t * restrict ps*);

#include <uchar.h>

size_t
c16rtomb(*char * restrict s, char16_t c, mbstate_t * restrict ps*);

size_t
c32rtomb(*char * restrict s, char32_t c, mbstate_t * restrict ps*);

DESCRIPTION

The **wcrtomb**(), **c16rtomb**() and **c32rtomb**() functions store a multibyte sequence representing the wide character *c*, including any necessary shift sequences, to the character array *s*, storing a maximum of MB_CUR_MAX bytes.

If *s* is NULL, these functions behave as if *s* pointed to an internal buffer and *c* was a null wide character (L'\0').

The *mbstate_t* argument, *ps*, is used to keep track of the shift state. If it is NULL, these functions use an internal, static *mbstate_t* object, which is initialized to the initial conversion state at program startup.

As certain multibyte characters may only be represented by a series of 16-bit characters, the **c16rtomb**() may need to invoked multiple times before a multibyte sequence is returned.

RETURN VALUES

These functions return the length (in bytes) of the multibyte sequence needed to represent *c*, or (*size_t*)-1 if *c* is not a valid wide character code.

ERRORS

The **wcrtomb**(), **c16rtomb**() and **c32rtomb**() functions will fail if:

[EILSEQ] An invalid wide character code was specified.

[EINVAL] The conversion state is invalid.

SEE ALSO

mbrtowc(3), multibyte(3), setlocale(3), wctomb(3)

STANDARDS

The **wcrtomb**(), **c16rtomb**() and **c32rtomb**() functions conform to ISO/IEC 9899:2011 ("ISO C11").