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

$ man mbsrtowcs.3

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

NAME

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

SYNOPSIS

   #include <wchar.h>

   size_t mbsrtowcs(wchar_t *dest, const char **src,

           size_t len, mbstate_t *ps);

DESCRIPTION

   If dest is not NULL, the mbsrtowcs() function converts the multibyte

   string *src to a wide-character string starting at dest. At most len

   wide characters are written to dest. The shift state *ps is updated.

   The conversion is effectively performed by repeatedly calling mbr?

   towc(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:

   1. 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.

   2. len 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 re?

      turned.

   3. The multibyte string has been completely converted, including the

terminating null wide character ('\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 wide characters written to dest, exclud‐ ing the terminating null wide character, is returned.

If dest is NULL, len is ignored, and the conversion proceeds as above, except that the converted wide characters are not written out to mem‐ ory, and that no length limit exists.

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

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

RETURN VALUE

The mbsrtowcs() function returns 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.

ATTRIBUTES

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

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???????????????????????????????????????????????????????????????
?Interface   ? Attribute     ? Value                ?
???????????????????????????????????????????????????????????????
?mbsrtowcs() ? Thread safety ? MT-Unsafe race:mbsrtowcs/!ps ?
???????????????????????????????????????????????????????????????
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CONFORMING TO

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

NOTES

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

Passing NULL as ps is not multithread safe.

SEE ALSO

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

COLOPHON

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