



Full credit is given to the above companies including the OS that this PDF file was generated!

Rocky Enterprise Linux 9.2 Manual Pages on command 'mbsinit.3'

\$ man mbsinit.3

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

NAME

mbsinit - test for initial shift state

SYNOPSIS

```
#include <wchar.h>
```

```
int mbsinit(const mbstate_t *ps);
```

DESCRIPTION

Character conversion between the multibyte representation and the wide character representation uses conversion state, of type `mbstate_t`. Conversion of a string uses a finite-state machine; when it is interrupted after the complete conversion of a number of characters, it may need to save a state for processing the remaining characters. Such a conversion state is needed for the sake of encodings such as ISO-2022 and UTF-7.

The initial state is the state at the beginning of conversion of a string. There are two kinds of state: the one used by multibyte to wide character conversion functions, such as `mbsrtowcs(3)`, and the one used by wide character to multibyte conversion functions, such as `wcsr?`

tombs(3), but they both fit in a mbstate_t, and they both have the same representation for an initial state.

For 8-bit encodings, all states are equivalent to the initial state.

For multibyte encodings like UTF-8, EUC-*, BIG5 or SJIS, the wide character to multibyte conversion functions never produce non-initial states, but the multibyte to wide-character conversion functions like mbrtowc(3) do produce non-initial states when interrupted in the middle of a character.

One possible way to create an mbstate_t in initial state is to set it to zero:

```
mbstate_t state;
memset(&state, 0, sizeof(state));
```

On Linux, the following works as well, but might generate compiler warnings:

```
mbstate_t state = { 0 };
```

The function mbsinit() tests whether *ps corresponds to an initial state.

RETURN VALUE

mbsinit() returns nonzero if *ps is an initial state, or if ps is NULL.

Otherwise, it returns 0.

ATTRIBUTES

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

??

?Interface ? Attribute ? Value ?

??

?mbsinit() ? Thread safety ? MT-Safe ?

??

CONFORMING TO

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

NOTES

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

SEE ALSO

`mbrlen(3)`, `mbrtowc(3)`, `mbsrtowcs(3)`, `wcrtomb(3)`, `wcsrtombs(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

2020-11-01

MBSINIT(3)