

**NAME**

**btowc**, **wctob** - convert between wide and single-byte characters

**LIBRARY**

Standard C Library (libc, -lc)

**SYNOPSIS**

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

```
wint_t
```

```
btowc(int c);
```

```
int
```

```
wctob(wint_t c);
```

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

```
#include <xlocale.h>
```

```
wint_t
```

```
btowc_l(int c, locale_t loc);
```

```
int
```

```
wctob_l(wint_t c, locale_t loc);
```

**DESCRIPTION**

The **btowc()** function converts a single-byte character into a corresponding wide character. If the character is EOF or not valid in the initial shift state, **btowc()** returns WEOF.

The **wctob()** function converts a wide character into a corresponding single-byte character. If the wide character is WEOF or not able to be represented as a single byte in the initial shift state, **wctob()** returns EOF.

The **\_l**-suffixed versions take an explicit locale argument, while the non-suffixed versions use the current global or per-thread locale.

**SEE ALSO**

**mbrtowc(3)**, **multibyte(3)**, **wcrtomb(3)**

**STANDARDS**

The **btowc()** and **wctob()** functions conform to IEEE Std 1003.1-2001 ("POSIX.1").

**HISTORY**

The **btowc()** and **wctob()** functions first appeared in FreeBSD 5.0.