

**NAME**

**towctrans**, **wctrans** - wide character mapping functions

**LIBRARY**

Standard C Library (libc, -lc)

**SYNOPSIS**

```
#include <wctype.h>
```

*wint\_t*

```
towctrans(wint_t wc, wctrans_t desc);
```

*wctrans\_t*

```
wctrans(const char *charclass);
```

**DESCRIPTION**

The **wctrans()** function returns a value of type *wctrans\_t* which represents the requested wide character mapping operation and may be used as the second argument for calls to **towctrans()**.

The following character mapping names are recognised:

tolower      toupper

The **towctrans()** function transliterates the wide character *wc* according to the mapping described by *desc*.

**RETURN VALUES**

The **towctrans()** function returns the transliterated character if successful, otherwise it returns the character unchanged and sets *errno*.

The **wctrans()** function returns non-zero if successful, otherwise it returns zero and sets *errno*.

**EXAMPLES**

Reimplement **towupper()** in terms of **towctrans()** and **wctrans()**:

```
wint_t
mytowupper(wint_t wc)
{
    return (towctrans(wc, wctrans("toupper")));
}
```

**ERRORS**

The **towctrans()** function will fail if:

[EINVAL]           The supplied *desc* argument is invalid.

The **wctrans()** function will fail if:

[EINVAL]           The requested mapping name is invalid.

**SEE ALSO**

tolower(3), toupper(3), wctype(3)

**STANDARDS**

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

**HISTORY**

The **towctrans()** and **wctrans()** functions first appeared in FreeBSD 5.0.