

NAME

wcstok – split wide-character string into tokens

LIBRARY

Standard C library (*libc*, *-lc*)

SYNOPSIS

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

```
wchar_t *wcstok(wchar_t *restrict wcs, const wchar_t *restrict delim,
                wchar_t **restrict ptr);
```

DESCRIPTION

The **wcstok()** function is the wide-character equivalent of the **strtok(3)** function, with an added argument to make it multithread-safe. It can be used to split a wide-character string *wcs* into tokens, where a token is defined as a substring not containing any wide-characters from *delim*.

The search starts at *wcs*, if *wcs* is not NULL, or at **ptr*, if *wcs* is NULL. First, any delimiter wide-characters are skipped, that is, the pointer is advanced beyond any wide-characters which occur in *delim*. If the end of the wide-character string is now reached, **wcstok()** returns NULL, to indicate that no tokens were found, and stores an appropriate value in **ptr*, so that subsequent calls to **wcstok()** will continue to return NULL. Otherwise, the **wcstok()** function recognizes the beginning of a token and returns a pointer to it, but before doing that, it zero-terminates the token by replacing the next wide-character which occurs in *delim* with a null wide character (L'\0'), and it updates **ptr* so that subsequent calls will continue searching after the end of recognized token.

RETURN VALUE

The **wcstok()** function returns a pointer to the next token, or NULL if no further token was found.

ATTRIBUTES

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

Interface	Attribute	Value
wcstok()	Thread safety	MT-Safe

STANDARDS

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

NOTES

The original *wcs* wide-character string is destructively modified during the operation.

EXAMPLES

The following code loops over the tokens contained in a wide-character string.

```
wchar_t *wcs = ...;
wchar_t *token;
wchar_t *state;
for (token = wcstok(wcs, L" \t\n", &state);
    token != NULL;
    token = wcstok(NULL, L" \t\n", &state)) {
    ...
}
```

SEE ALSO

strtok(3), **wcschr(3)**