

**NAME**

**getdelim**, **getline** - get a line from a stream

**LIBRARY**

Standard C Library (libc, -lc)

**SYNOPSIS**

```
#include <stdio.h>
```

*ssize\_t*

```
getdelim(char ** restrict linep, size_t * restrict linecapp, int delimiter, FILE * restrict stream);
```

*ssize\_t*

```
getline(char ** restrict linep, size_t * restrict linecapp, FILE * restrict stream);
```

**DESCRIPTION**

The **getdelim**() function reads a line from *stream*, delimited by the character *delimiter*. The **getline**() function is equivalent to **getdelim**() with the newline character as the delimiter. The delimiter character is included as part of the line, unless the end of the file is reached.

The caller may provide a pointer to a malloced buffer for the line in *\*linep*, and the capacity of that buffer in *\*linecapp*. These functions expand the buffer as needed, as if via **realloc**(). If *linep* points to a NULL pointer, a new buffer will be allocated. In either case, *\*linep* and *\*linecapp* will be updated accordingly.

**RETURN VALUES**

The **getdelim**() and **getline**() functions return the number of characters stored in the buffer, excluding the terminating NUL character. The value -1 is returned if an error occurs, or if end-of-file is reached.

**EXAMPLES**

The following code fragment reads lines from a file and writes them to standard output. The **fwrite**() function is used in case the line contains embedded NUL characters.

```
char *line = NULL;
size_t linecap = 0;
ssize_t linelen;
while ((linelen = getline(&line, &linecap, fp)) > 0)
    fwrite(line, linelen, 1, stdout);
free(line);
```

**ERRORS**

These functions may fail if:

[EINVAL]           Either *linep* or *linecapp* is NULL.

[EOVERFLOW]       No delimiter was found in the first SSIZE\_MAX characters.

These functions may also fail due to any of the errors specified for **fgets()** and **malloc()**.

**SEE ALSO**

fgetln(3), fgets(3), malloc(3)

**STANDARDS**

The **getdelim()** and **getline()** functions conform to IEEE Std 1003.1-2008 ("POSIX.1").

**HISTORY**

These routines first appeared in FreeBSD 8.0.

**BUGS**

There are no wide character versions of **getdelim()** or **getline()**.