



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

C:\>man getline.3

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

NAME

getline, getdelim - delimited string input

SYNOPSIS

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

```
ssize_t getline(char **lineptr, size_t *n, FILE *stream);
```

```
ssize_t getdelim(char **lineptr, size_t *n, int delim, FILE *stream);
```

Feature Test Macro Requirements for glibc (see `feature_test_macros(7)`):

getline(), getdelim():

Since glibc 2.10:

```
_POSIX_C_SOURCE >= 200809L
```

Before glibc 2.10:

```
_GNU_SOURCE
```

DESCRIPTION

getline() reads an entire line from stream, storing the address of the buffer containing the text into *lineptr. The buffer is null-terminated and includes the newline character, if one was found.

If *lineptr is set to NULL and *n is set 0 before the call, then getline() will allocate a buffer for storing the line. This buffer should be freed by the programmer even if getline() failed.

Alternatively, before calling getline(), *lineptr can contain a pointer to a malloc(3)-allocated buffer *n bytes in size. If the buffer is not large enough to

hold the line, `getline()` resizes it with `realloc(3)`, updating `*lineptr` and `*n` as necessary.

In either case, on a successful call, `*lineptr` and `*n` will be updated to reflect the buffer address and allocated size respectively.

`getdelim()` works like `getline()`, except that a line delimiter other than newline can be specified as the delimiter argument. As with `getline()`, a delimiter character is not added if one was not present in the input before end of file was reached.

RETURN VALUE

On success, `getline()` and `getdelim()` return the number of characters read, including the delimiter character, but not including the terminating null byte (`'\0'`).

This value can be used to handle embedded null bytes in the line read.

Both functions return `-1` on failure to read a line (including end-of-file condition). In the event of an error, `errno` is set to indicate the cause.

ERRORS

`EINVAL` Bad arguments (`n` or `lineptr` is `NULL`, or stream is not valid).

`ENOMEM` Allocation or reallocation of the line buffer failed.

ATTRIBUTES

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

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?Interface ? Attribute ? Value ?

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?`getline()`, `getdelim()` ? Thread safety ? MT-Safe ?

??

CONFORMING TO

Both `getline()` and `getdelim()` were originally GNU extensions. They were standardized in POSIX.1-2008.

EXAMPLE

```
#define _GNU_SOURCE
#include <stdio.h>
#include <stdlib.h>

int
main(int argc, char *argv[])
```

```

{
FILE *stream;

char *line = NULL;

size_t len = 0;

ssize_t nread;

if (argc != 2) {
    fprintf(stderr, "Usage: %s <file>\n", argv[0]);
    exit(EXIT_FAILURE);
}

stream = fopen(argv[1], "r");

if (stream == NULL) {
    perror("fopen");
    exit(EXIT_FAILURE);
}

while ((nread = getline(&line, &len, stream)) != -1) {
    printf("Retrieved line of length %zu:\n", nread);
    fwrite(line, nread, 1, stdout);
}

free(line);

fclose(stream);

exit(EXIT_SUCCESS);
}

```

SEE ALSO

read(2), fgets(3), fopen(3), fread(3), scanf(3)

COLOPHON

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