

**NAME**

**openpam\_readlinev** - read a line from a file and split it into words

**SYNOPSIS**

```
#include <sys/types.h>
#include <stdio.h>
#include <security/pam_appl.h>
#include <security/openpam.h>
```

*char \*\**

```
openpam_readlinev(FILE *f, int *lineno, int *lenp);
```

**DESCRIPTION**

The **openpam\_readlinev**() function reads a line from a file, splits it into words according to the rules described in the **openpam\_readword**(3) manual page, and returns a list of those words.

If *lineno* is not NULL, the integer variable it points to is incremented every time a newline character is read. This includes quoted or escaped newline characters and the newline character at the end of the line.

If *lenp* is not NULL, the number of words on the line is stored in the variable to which it points.

**RETURN VALUES**

If successful, the **openpam\_readlinev**() function returns a pointer to a dynamically allocated array of pointers to individual dynamically allocated NUL-terminated strings, each containing a single word, in the order in which they were encountered on the line. The array is terminated by a NULL pointer.

The caller is responsible for freeing both the array and the individual strings by passing each of them to **free**(3).

If the end of the line was reached before any words were read, **openpam\_readlinev**() returns a pointer to a dynamically allocated array containing a single NULL pointer.

The **openpam\_readlinev**() function can fail and return NULL for one of four reasons:

- The end of the file was reached before any words were read; *errno* is zero, **ferror**(3) returns zero, and **feof**(3) returns a non-zero value.
- The end of the file was reached while a quote or backslash escape was in effect; *errno* is set to **EINVAL**, **ferror**(3) returns zero, and **feof**(3) returns a non-zero value.

- An error occurred while reading from the file; *errno* is non-zero, `error(3)` returns a non-zero value and `feof(3)` returns zero.
- A `malloc(3)` or `realloc(3)` call failed; *errno* is set to `ENOMEM`, `error(3)` returns a non-zero value, and `feof(3)` may or may not return a non-zero value.

**SEE ALSO**

`openpam_readline(3)`, `openpam_readword(3)`, `pam(3)`

**STANDARDS**

The `openpam_readlinev()` function is an OpenPAM extension.

**AUTHORS**

The `openpam_readlinev()` function and this manual page were developed by Dag-Erling Smórgrav <*des@des.no*>.