NAME

openpam_straddch - add a character to a string, expanding the buffer if needed

SYNOPSIS

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

int
openpam_straddch(*char **str*, *size_t *size*, *size_t *len*, *int ch*);

DESCRIPTION

The **openpam_straddch**() function appends a character to a dynamically allocated NUL-terminated buffer, reallocating the buffer as needed.

The *str* argument points to a variable containing either a pointer to an existing buffer or NULL. If the value of the variable pointed to by *str* is NULL, a new buffer is allocated.

The *size* and *len* argument point to variables used to hold the size of the buffer and the length of the string it contains, respectively.

The final argument, *ch*, is the character that should be appended to the string. If *ch* is 0, nothing is appended, but a new buffer is still allocated if *str* is NULL. This can be used to "bootstrap" the string.

If a new buffer is allocated or an existing buffer is reallocated to make room for the additional character, *str* and *size* are updated accordingly.

The **openpam_straddch**() function ensures that the buffer is always NUL-terminated.

If the **openpam_straddch**() function is successful, it increments the integer variable pointed to by *len* (unless *ch* was 0) and returns 0. Otherwise, it leaves the variables pointed to by *str*, *size* and *len* unmodified, sets *errno* to ENOMEM and returns -1.

RETURN VALUES

The **openpam_straddch**() function returns 0 on success and -1 on failure.

SEE ALSO

pam(3), pam_strerror(3)

STANDARDS

The **openpam_straddch**() function is an OpenPAM extension.

AUTHORS

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