#### **NAME**

exit\_curses, exit\_terminfo - check for memory leaks in curses

#### **SYNOPSIS**

```
#include <curses.h>
void exit_curses(int code);

#include <term.h>
void exit_terminfo(int code);

/* deprecated (intentionally not declared in curses.h or term.h) */
void _nc_free_and_exit(int code);
void _nc_free_tinfo(int code);
```

### **DESCRIPTION**

These functions are used to simplify analysis of memory leaks in the *ncurses* library.

Any implementation of curses must not free the memory associated with a screen, since (even after calling **endwin**(3X)), it must be available for use in the next call to **refresh**(3X). There are also chunks of memory held for performance reasons. That makes it hard to analyze curses applications for memory leaks. When using the specially configured debugging version of the *ncurses* library, applications can call functions which free those chunks of memory, simplifying the process of memory-leak checking.

Some of the functions are named with a "\_nc\_" prefix because they are not intended for use in the non-debugging library:

## \_nc\_freeall

This frees (almost) all of the memory allocated by ncurses.

# \_nc\_free\_and\_exit

This frees the memory allocated by *ncurses* (like \_nc\_freeall), and exits the program. It is preferred over \_nc\_freeall since some of that memory may be required to keep the application running. Simply exiting (with the given exit-code) is safer.

# \_nc\_free\_tinfo

Use this function if only the low-level terminfo functions (and corresponding library) are used. Like \_nc\_free\_and\_exit, it exits the program after freeing memory.

The functions prefixed "\_nc" are normally not available; they must be configured into the library at build time using the **--disable-leaks** option. That compiles-in code that frees memory that normally would not be freed.

The **exit\_curses** and **exit\_terminfo** functions call **\_nc\_free\_and\_exit** and **\_nc\_free\_tinfo** if the library is configured to support memory-leak checking. If the library is not configured to support memory-leak checking, they simply call **exit**.

### **RETURN VALUE**

These functions do not return a value.

#### **PORTABILITY**

These functions are not part of X/Open Curses; nor do other implementations of curses provide a similar feature.

In any implementation of X/Open Curses, an application can free part of the memory allocated by curses:

⊕ The portable part of **exit\_curses** can be freed using **delscreen**, passing the *SCREEN* pointer returned by **newterm**.

In some implementations, there is a global variable **sp** which could be used, e.g., if the screen were only initialized using **initscr**.

• The portable part of **exit\_terminfo** can be freed using **del\_curterm**.

In this case, there is a global variable **cur\_term** which can be used as parameter.

#### **SEE ALSO**

curses(3X),  $curs\_initscr(3X)$ ,  $curs\_terminfo(3X)$