

NAME

touchwin, **touchline**, **untouchwin**, **wtouchln**, **is_linetouched**, **is_wintouched** – control terminal output refresh in a *curses* window

SYNOPSIS

```
#include <curses.h>

int touchline(WINDOW *win, int start, int count);

int touchwin(WINDOW *win);
int wtouchln(WINDOW *win, int y, int n, int changed);

int untouchwin(WINDOW *win);

bool is_linetouched(WINDOW *win, int line);
bool is_wintouched(WINDOW *win);
```

DESCRIPTION

The **touchwin** and **touchline** routines throw away all optimization information about which parts of the window have been touched, by pretending that the entire window has been drawn on. This is sometimes necessary when using overlapping windows, since a change to one window affects the other window, but the records of which lines have been changed in the other window do not reflect the change. The routine **touchline** only pretends that *count* lines have been changed, beginning with line *start*.

The **untouchwin** routine marks all lines in the window as unchanged since the last call to **wrefresh**.

The **wtouchln** routine makes *n* lines in the window, starting at line *y*, look as if they have (*changed*=1) or have not (*changed*=0) been changed since the last call to **wrefresh**.

The **is_linetouched** and **is_wintouched** routines return **TRUE** if the specified line/window was modified since the last call to **wrefresh**; otherwise they return **FALSE**. In addition, **is_linetouched** returns **ERR** if *line* is not valid for the given window.

RETURN VALUE

Functions returning integers return **ERR** upon failure and **OK** upon success.

In *ncurses*,

is_linetouched

returns **ERR** if the window pointer is null, or if the line number is outside the window boundaries.

The constant **ERR** is distinct from **TRUE** and **FALSE**, which are the normal return values of this function. Because the function returns **abool**, returning **ERR** (which is neither **TRUE** nor **FALSE**) may not be supported by the compiler.

To provide error-checking and also match the X/Open function prototype, the **ERR** is provided by a macro named **is_linetouched**. The actual function returns **FALSE** when it detects an error.

wtouchln

returns **ERR** if the window pointer is null, or if the line number is outside the window boundaries.

NOTES

All of these functions except **wtouchln** may be implemented as macros.

PORTABILITY

X/Open Curses Issue 4 describes these functions. It specifies no error conditions for them.

SVr4 describes a successful return value except where “otherwise noted” as “an integer value other than **ERR**”.

SVr4 does not check *win* to ensure that it is not a null pointer.

HISTORY

SVr2 (1984) introduced *touchwin*,

SVr3 (1987) added *touchline*. SVr3.1 later that year supplied *is_linetouched*, *is_wintouched*, *untouchwin*, and *wtouchln*.

SEE ALSO

curses(3X), ***curs_refresh***(3X), ***curs_variables***(3X)