NAME
      bkgrnd, **wbkgrnd**, **bkgrndset**, **wbkgrndset**, **getbkgrnd**, **wgetbkgrnd** - manipulate background of a *curses*
      window of wide characters

SYNOPSIS
      #include <curses.h>

      int bkgrnd(const cchar_t **wch***);**
      int wbkgrnd(WINDOW **win***, const cchar_t ****wch***);**

      void bkgrndset(const cchar_t **wch***);**
      void wbkgrndset(WINDOW **win***, const cchar_t ****wch***);**

      int getbkgrnd(cchar_t **wch***);**
      int wgetbkgrnd(WINDOW **win***, cchar_t ****wch***);**

DESCRIPTION
      The *background* of a *curses* window (in the library's "wide" configuration) is a *cchar_t* combining a set
      of attributes (see **curs_attr**(3X)) with a complex character called the *blank character.*

      The blank character is a spacing character that populates a window's character cells when their
      contents are erased without replacement. The background's attributes are combined with all non-blank
      characters written to the window, as with the **wadd_wch**(3X) and **wins_wch**(3X) families of functions.

      The blank character and attributes of the background combine with characters written to the window as
      described below. The background becomes a property of the character and moves with it through any
      scrolling and insert/delete line/character operations.

      To the extent possible on a given terminal, the attribute part of the background is displayed as the
      graphic rendition of the character put on the screen.

   bkgrnd, wbkgrnd
      bkgrnd and **wbkgrnd** set the background property of **stdscr** or the specified window and then apply this
      setting to every character cell in that window.

      ⊕   The rendition of every character in the window changes to the new background rendition.

      ⊕   Wherever the former background character appears, it changes to the new background character.

      ncurses updates the rendition of each character cell by comparing the character, non-color attributes,

and colors. The library applies to following procedure to each cell in the window, whether or not it is blank.

⊕   *ncurses* first compares the cell's character to the previously specified blank character; if they match, *ncurses* writes the new blank character to the cell.

⊕   *ncurses* then checks if the cell uses color, that is, its color pair value is nonzero. If not, it simply replaces the attributes and color pair in the cell with those from the new background character.

⊕   If the cell uses color, and its background color matches that of the current window background, *ncurses* removes attributes that may have come from the current background and adds those from the new background. It finishes by setting the cell's background to use the new window background color.

⊕   If the cell uses color, and its background color does not match that of the current window background, *ncurses* updates only the non-color attributes, first removing those that may have come from the current background, and then adding attributes from the new background.

ncurses treats a background character value of zero (0) as a blank character.

If the terminal does not support color, or if color has not been initialized with **start_color**(3X), *ncurses* ignores the new background character's color attribute.

bkgrndset, wbkgrndset
 bkgrndset and **wbkgrndset** manipulate the background of the applicable window, without updating the character cells as **bkgrnd** and **wbkgrnd** do; only future writes reflect the updated background.

getbkgrnd, wgetbkgrnd
 The **getbkgrnd** and **wgetbkgrnd** functions obtain the background character and attribute pair of **stdscr** or the specified window and store it via the *wch* pointer.

RETURN VALUE
 bkgrndset and **wbkgrndset** do not return a value.

 The other functions return **ERR** upon failure and **OK** upon success. In *ncurses*, failure occurs if

⊕   a *WINDOW* pointer *win* is null, or

⊕   a *cchar_t* pointer *wch* is null.

NOTES

bkgrnd, **bkgrndset**, and **getbkgrnd** may be implemented as macros.

Unlike their counterparts in the non-"wide" configuration of *ncurses*, **getbkgrnd** and **wgetbkgrnd** supply the background character and attribute in a modifiable *cchar_t* parameter, not as the return value.

PORTABILITY

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

X/Open Curses does not provide details of how the rendition is updated. This implementation follows the approach used in SVr4 *curses*.

SEE ALSO

curs_bkgd(3X) describes the corresponding functions in the non-"wide" configuration of *ncurses*.

curses(3X), **curs_add_wch**(3X), **curs_attr**(3X)