

deskTOPia

# CURSORITIS

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Customising the cursor can add to the individuality of your desktop. You don't have to settle for what XFree8 offers as standard, provided you are a little bit creative



The cursor has a different appearance under X11 depending on what it is placed over or what the application is currently doing. But the fact that this

## Cursors

The executable program *decurs* from the directory *decurs-0.42.1-alpha/src* is then copied as *root* to */usr/local/bin*. If the font file named *cursor.bdf* which comes with the *src* directory is in the working directory when you start, this is automatically loaded, and already you will have come across an old acquaintance – the *X\_cursor* cross hairs (Figure 1).

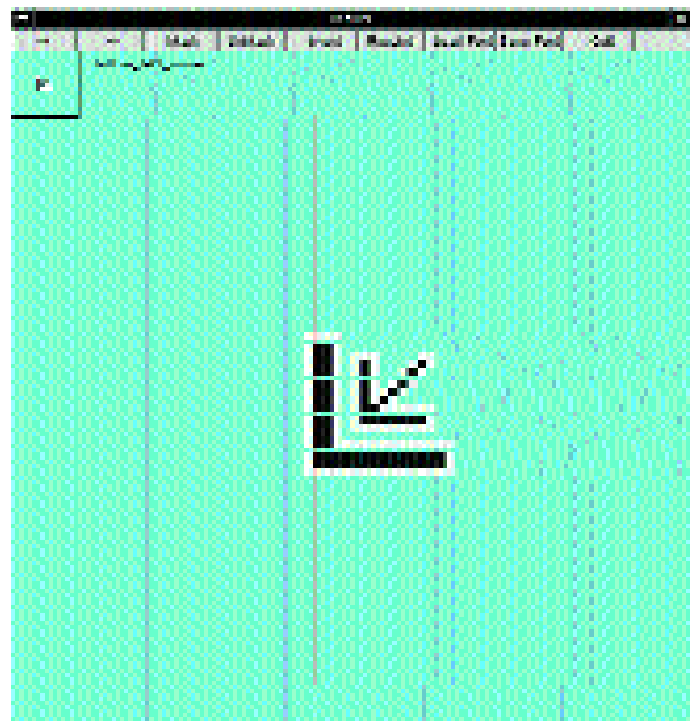
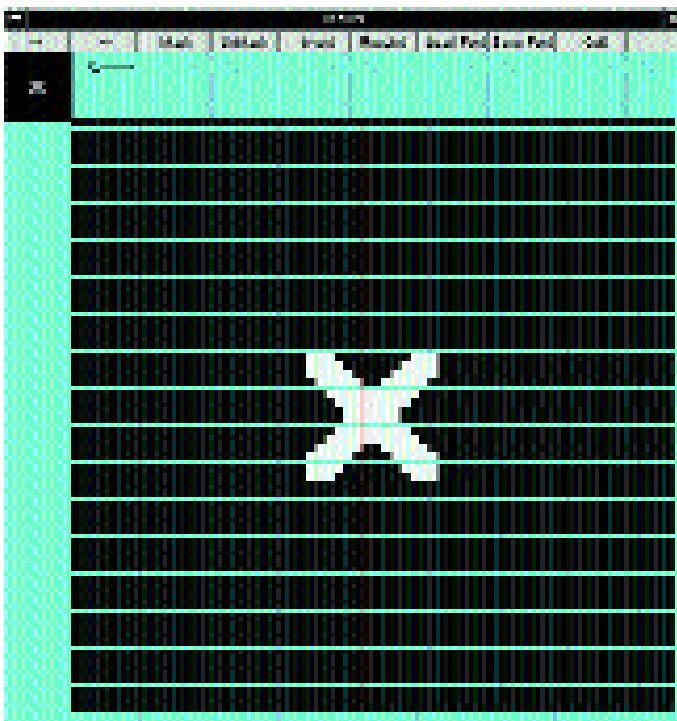
If you would prefer to take a different font file as the starting point, it is possible to select, using the *Load Font* button from the *fonts* directory in the *decurs* archive, a different one –

is nothing more than a font file packed using *gzip* named *cursor.pcf.gz*, seems to suggest that this could also be swapped. But for what? Still at the Alpha stage, but already thoroughly usable – at <http://www.hut.fi/u/pvsavola/decurs.html> you can download a cursor font editor program named *decurs*. Provided the GTK library, the appropriate *devel* package and the C++ wrappers GTK- (*gtkmm* and *gtkmm-devel* or similar) are installed, all you need to compile are a *configure* and *make*.

although at this point you should bear in mind that you are actually grabbing a cursor font. Anyone using a text font whose first **glyph** is not specified by *decurs* with the name *X\_cursor* can carry on editing, but should refrain from installing the result as a cursor font.

[left]  
Figure 1: *decurs* with *cursor.bdf* file loaded

[right]  
Figure 2: When editing, masked glyphs are edited



The rest is simple: First, the entire font is masked using *Mask*. This gives you a view of the various cursors as they will appear on the desktop (Figure 2). Using the arrow keys, you can then move from one glyph to the next, at the same time seeing amazing cursors you won't usually come across, since they are never used.

The primary candidates for change are those cursors which you've already seen ranging free. Once a victim is found, then you set a black pixel with a right mouse click and a white one with a left click. Pressing the left mouse button with the Shift key held down deletes a pixel. It becomes transparent and the turquoise background of the character interface becomes visible.

The *Invert* button turns black pixels into white ones and white into black. On the other hand if you press Ctrl and left-click at the same time, you can set the hot spot of the cursor. Where the red cross hairs lie is the point at which the exact mouse focus will appear later. Bundling it onto the wrong end of an arrow means that the accuracy of the user will suffer.

If you are interested in the exact dimensions of the current glyph, a press on the B key will help. This information can be found in the X-Terminal window in which *decurs* has been started (Figure 3).

Once the cursor font has been edited, it is unmasked using *UnMask*, before being saved using *save font*. Next, a little bit of manual labour is required, because the *.bdf* file created must now be made into a *.pcf.gz*. This is done using the commands

```
bdftopcf -o cursor.pcf new_cursor_font.bdf
gzip cursor.pcf
```

Once *root* has made a backup copy of the original cursor font in */usr/X11R6/lib/X11/fonts/misc/cursor.pcf.gz* or similar, the newly-created *cursor.pcf* file is copied into its place and X is restarted.

If the cursor with the new font is now invisible (because you have saved an important glyph in pieces), keep your cool. Kill off X with Ctrl+Alt+ Backspace and recopy the old backed-up cursor font file to its original position.

If, despite being edited, a cursor appears in the old, familiar guise, you will unfortunately have to settle for this. Many applications such as *gimp* use their own cursors instead of those from the cursor font.

## Root cursor

If this is all too fiddly, you can merely change the cursor which appears when you move the mouse over the space on the **root window** not occupied by windows, toolbars or menus. A long-established command line program named

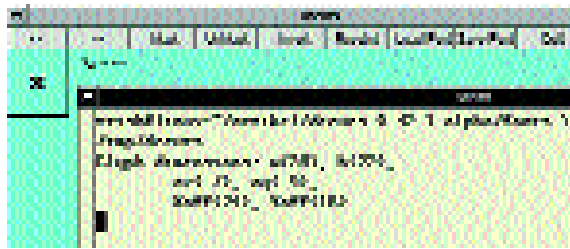


Figure 3: Information on the current glyph

*xsetroot* can be used for this purpose.

Someone has perhaps already made use of this in the pre-KDE/GNOME era to make the screen background totally black with *xsetroot -solid black*.

The option *-cursor* allows you to install an icon as root cursor. But not just any: Firstly, it must be in the form of a black and white X-bitmap (filename ending *.xbm*), and also in two copies. So that the cursor is not disfigured by an ugly screen edge, a mask bitmap is produced, which delimits the outlines of the cursor. The section of the bitmap serving as cursor is made black for this (Figures 4 and 5).

To do this, simply paint the outlines of the cursor image with a graphics program or, even better, an icon editor, in black, and save the mask under a different name (but it must be as an *.xbm* file). Anyone not wanting to design their own icon can make use of the *xbm* fund in their own computer. A *locate .xbm | less* should provide an ample selection. A

```
xsetroot -cursor image.xbm mask.xbm
```

then comes up with a whole new cursor experience. If you find black on white too boring, you can turn the black foreground colour red with *-fg red* and the white cursor background black with *-bg black*. The program *xcolors* tells you which options are available in the choice of colour. So a

```
xsetroot -cursor image.xbm mask.xbm -fg Lemo nChiffon1 -bg SeaGreen
```

is useful if you're curious about the colours available on your computer. Using the picture bitmap shown in Figure 4 and the mask bitmap of Figure 5, results in a cursor featuring tiny light yellow computers with nostalgic green monitors, which are best seen against a black background.

Whilst browsing the cursor font with *decurs* you may have found a glyph that you wish to use as root cursor. This is also possible under *xsetroot*. Thus

```
xsetroot -cursor_name bogosity
```

makes the bogosity glyph in *cursor.pcf.gz* the standard cursor.

Unfortunately, desktop environments like KDE prevent *xsetroot* effects. To make proper use of *xsetroot* you'll need a standalone window manager like *windowmaker*. ■



[left] Figure 4: Cursor image ...

[right] Figure 5: ... and mask

**Glyph:** Symbol of a font  
**Root window:** The bare screen background managed by a window manager. If you start X without a window manager or desktop environment, the root window will show itself as a black and white background. It is called a root window because it is the mother of all the windows which the window manager can place thereon.

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