

\$SPAD/src/lib cursor.c

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Abstract

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1 License

```
/*
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```

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```
*/
```

— * —

```
#include <stdlib.h>
```

```
#include "cursor.h1"
```

```
/*
 * This routine changes the shape of the cursor. it is a modified version of
 * a program by SMWatt, called cursor.c. JMW 6/22/89
 */
```

```
/* this stuff can only be done on AIX <AND> the right terminal (aixterm,hft) */
#if (defined(RIOSplatform) || defined(RTplatform)) && !defined(_AIX41)
```

```

#include "edible.h"
/* the HFT stuff requires ioctl's and termio's */
#include <termio.h>
#include <stdio.h>
#include <fcntl.h>
#include <sys/hft.h>

int
Cursor_shape(int shape)
{
    int hftfd;
    char hftpath[16], s[100];
    int chno;
    int i;
    struct termio oldterm, newterm;
    struct hftgetid hftgid;
    char *termVal;

    termVal = (char *) getenv("TERM");
    if (strcmp("hft", termVal) && strncmp("aixterm", termVal, 7))
        return;

    /* determine the desired shape */
    if (shape < 0 || shape > 5) {
        fprintf(stderr, "%d - Invalid cursor number\n");
        return (-1);
    }
    /* change the shape */
    s[0] = 033; /* hf_intro.hf_esc */
    s[1] = '['; /* hf_intro.hf_lbr */
    s[2] = 'x'; /* hf_intro.hf_ex */
    s[3] = 0; /* hf_intro.hf_len[0] */
    s[4] = 0; /* hf_intro.hf_len[1] */
    s[5] = 0; /* hf_intro.hf_len[2] */
    s[6] = 10; /* hf_intro.hf_len[3] */
    s[7] = 2; /* hf_intro.hf_typehi */
    s[8] = 8; /* hf_intro.hf_typelo */
    s[9] = 2; /* hf_sublen */
    s[10] = 0; /* hf_subtype */
    s[11] = 0; /* hf_rsvd */
    s[12] = shape; /* hf_shape */

    if (ioctl(0, HFTGETID, &hftgid) < 0) {
        /* perror("ioctl: HFTGETID"); */
        chno = -1;
    }
    else
        chno = hftgid.hf_chan;
}

```

```

if (chno == -1) {
    /** try being moronic and just writing what I want to
        standard output          ****/

    if (((ioctl(2, TCGETA, &oldterm)) == -1) ||
        ((ioctl(2, TCGETA, &newterm)) == -1)) {
        perror("Getting termio");
        exit(0);
    }
    newterm.c_oflag = newterm.c_lflag = newterm.c_iflag = 0;
    newterm.c_cc[0] = -1;
    for (i = 1; i <= 5; i++)
        newterm.c_cc[i] = 0;
    if ((ioctl(2, TCSETAF, &newterm)) == -1) {
        perror("Setting to raw mode");
        exit(0);
    }
    write(2, s, 13);
    read(0, s, 1024);
    if ((ioctl(2, TCSETAF, &oldterm)) == -1) {
        perror("Resetting terminal");
        exit(0);
    }
}
else {
    /* open the currently active virtual terminal on the hft */
    sprintf(hftpath, "/dev/hft/%d", chno);
    if ((hftfd = open(hftpath, O_RDWR)) == -1) {
        perror("Could not open hft channel\n");
        exit(0);
    }
    write(hftfd, s, 13);
}
}
#else

int
Cursor_shape(int shape)
{
    return shape;
}
#endif

```

References

- [1] nothing