Change cursor face of Linux Console

Sugizaki Yukimasa (Namiki Secondary School, Ibaraki Prefecture)

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Abstract

In Linux console, shapes, colours and blinking can be changed. This paper explains how to change and set as default.

Contents

1 By using Escape squences

Define escape charactor as `ESC`.

The format is below.

`ESC[?A;B;Cc` (A, B and C are 8-bit decimal numbers.)

1.1 Parameter `A`

Parameter `A` changes cursor shapes and states. Table1.1 shows effects of parameter `A`. Cursor and characters colour can be changed by the

number	effect
0	default
1	underline
. . .	
8	full block
$number + 16$	apply the software cursor

Table 1: Effects of parameter `A`

parameter `A` and `B` if the software cursor applied.

1.2 Parameter `B`

Parameter `B` changes the colour and brightness of cursor and charcters. Table 1.2 shows the bit assignments of parameter `B`.

field#	effect if 1	
1		bright
2	cursor	red component
3		green component
4		blue component
5		bright
6	characters	red component(reversed)
7		green component(reversed)
8		blue component(reversed)

Table 2: Bit assignments of parameter `B`

1.3 Parameter `C`

Effect of Parameter `C` is described as equation 1.

$$B = B \bigoplus C \tag{1}$$

2 Set cursor shape as default in kernel command line

We use escape-squence-formed cursor shape settings(parameter `A`, `B` and `C` in section 1) in kernel command line. The form is below.

```
vt.cur_default=0xCCBBAA
```
Note that CC, BB and AA are hexadecimal number.