

NAME

console – console terminal and virtual consoles

DESCRIPTION

A Linux system has up to 63 *virtual consoles* (character devices with major number 4 and minor number 1 to 63), usually called `/dev/tty n` with $1 \leq n \leq 63$. The current console is also addressed by `/dev/console` or `/dev/tty0`, the character device with major number 4 and minor number 0. The device files `/dev/*` are usually created using the script `MAKEDEV`, or using `mknod(1)`, usually with mode 0622 and owner root.tty.

Before kernel version 1.1.54 the number of virtual consoles was compiled into the kernel (in `tty.h`: `#define NR_CONSOLES 8`) and could be changed by editing and recompiling. Since version 1.1.54 virtual consoles are created on the fly, as soon as they are needed.

Common ways to start a process on a console are: (a) tell `init(8)` (in `inittab(5)`) to start a `mingetty(8)` (or `agetty(8)`) on the console; (b) ask `openvt(1)` to start a process on the console; (c) start X — it will find the first unused console, and display its output there. (There is also the ancient `doshell(8)`.)

Common ways to switch consoles are: (a) use `Alt+Fn` or `Ctrl+Alt+Fn` to switch to console n ; `AltGr+Fn` might bring you to console $n+12$ [here `Alt` and `AltGr` refer to the left and right `Alt` keys, respectively]; (b) use `Alt+RightArrow` or `Alt+LeftArrow` to cycle through the presently allocated consoles; (c) use the program `chvt(1)`. (The key mapping is user settable, see `loadkeys(1)`; the above mentioned key combinations are according to the default settings.)

The command `deallocvt(1)` (formerly `disalloc`) will free the memory taken by the screen buffers for consoles that no longer have any associated process.

Properties

Consoles carry a lot of state. I hope to document that some other time. The most important fact is that the consoles simulate vt100 terminals. In particular, a console is reset to the initial state by printing the two characters `ESC c`. All escape sequences can be found in `console_codes(4)`.

FILES

`/dev/console`
`/dev/tty*`

SEE ALSO

`chvt(1)`, `deallocvt(1)`, `loadkeys(1)`, `mknod(1)`, `openvt(1)`, `console_codes(4)`, `console_ioctl(4)`, `tty(4)`, `ttyS(4)`, `charsets(7)`, `agetty(8)`, `init(8)`, `mapscrn(8)`, `mingetty(8)`, `resizecons(8)`, `setfont(8)`

COLOPHON

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