

Terminal mode

A **terminal mode** is one of a set of possible states of a <u>terminal</u> or <u>pseudo terminal</u> <u>character</u> <u>device</u> in <u>Unix-like</u> systems and determines how characters written to the terminal are interpreted. In **cooked mode** data is <u>preprocessed</u> before being given to a program, while **raw mode** passes the data as-is to the program without interpreting any of the special characters.

The system intercepts special characters in cooked mode and interprets special meaning from them. <u>Backspace</u>, <u>delete</u>, and <u>Control-D</u> are typically used to enable <u>line-editing</u> for the input to the running programs, and other <u>control characters</u> such as <u>Control-C</u> and <u>Control-Z</u> are used for <u>job control</u> or associated with other <u>signals</u>. The precise definition of what constitutes a cooked mode is operating system-specific. [1]

For example, if "ABC<Backspace>D" is given as an input to a program through a terminal character device in cooked mode, the program gets "ABD". But, if the terminal is in raw mode, the program gets the characters "ABC" followed by the <u>Backspace</u> character and followed by "D". In cooked mode, the <u>terminal line discipline</u> processes the characters "ABC<Backspace>D" and presents only the result ("ABD") to the program.

Technically, the term "cooked mode" should be associated only with <u>streams</u> that have a terminal line discipline, but generally it is applied to any system that does some amount of preprocessing. [2]

cbreak mode

cbreak mode (sometimes called **rare mode**) is a mode between <u>raw mode</u> and cooked mode. Unlike cooked mode it works with single characters at a time, rather than forcing a wait for a whole line and then feeding the line in all at once. Unlike raw mode, <u>keystrokes</u> like abort (usually Control-C) are still processed by the terminal and will interrupt the process.

See also

- Terminal emulator
- Serial communications
- Chapter <u>Serial communications in Linux and Unix</u> of the <u>Serial Data Communications</u>
 Programming <u>Wikibook</u>
- Command and Data modes

References

- 1. Terminal Mode MIT/GNU Scheme 7.7.90 (https://www.gnu.org/software/mit-scheme/d ocumentation/mit-scheme-ref/Terminal-Mode.html)
- 2. "Cooked mode from FOLDOC" (http://foldoc.org/cooked%20mode).

