

Tab Completion

1. GNU readline

GNU readline is a software library that provides line-editing and history capabilities for interactive programs, such as bash. It allows users to move the cursor, search the command history, control a kill ring (a more flexible version of a copy/paste clipboard) and use **tab completion** on a command-line terminal.

Readline key bindings are taken from the text editor Emacs, but can be customized. As a cross-platform library, readline allows applications on various systems to exhibit identical line-editing behavior.

While readline is a cross-platform library, some platforms do not include readline as part of the default system. It is, however, relatively easy to build independently.

Programs that are not distributed under the GPL usually use readline as an optional feature. Such programs would typically allow the user to specify whether or not to link with the readline library at build time.

2. Command line completion

Command line completion (also tab completion) is a common feature of command line interpreters, in which the program automatically fills in partially typed commands.