All the cool kids are using ncurses

May 21, 2010

Introduction
How we use it
Other Language Bindings
Outro

Prerequisites
Overview
A bit of history
Who uses NCurses today, and why?

Prerequisites

C or C++

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Overview of topics

- A bit of History
- Who uses it today, and why?
- How to use it

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Termcap, Terminfo

- ▶ What is a terminal?
- ▶ Curses/Termcap
- ▶ PCurses/Terminfo/vi
- ▶ NCurses, the best of all possible worlds

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NCurses is @#%!$ awesome!

- ▶ Use programs over ssh
- ▶ Why are you using system("clear")?
- ▶ gui-like controls on the command line
- ▶ irssi, screen, vim, cmus, vim, weechat, vim

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Like this...
Initialization
Moving Around
Printing, Clearing, Refreshing
Exit
Common Gotchas

Buffers

- ▶ Initialize the screen
- ▶ Move to a location
- ▶ Print or clear
- ▶ Refresh
- ▶ Clean up the screen, exit

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Initialization

- ▶ initscr() and stdscr
- ▶ keypad()
- ▶ getmaxyx()
- ▶ curs_set(0)

Moving Around

- ▶ move()
- ▶ addch() vs mvaddch() vs wmvaddch()

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Moving Around

- mvaddch()
- mvaddstr()
- mvprintw()
- clear()
- cleartoeol()
- cleartobot()
- refresh()

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Time to exit

- ▶ refresh before exit(0)
- ▶ endwin() before exit(0)

Common Gotchas

- y x reversal
- ESCDELAY and notimeout
- Don't forget to refresh()!
- Don't forget to curs_set(1)!
- No, really. Don't forget to endwin()

Tabs

- ► Ada95 binding
- ► Java binding (CHARVA)
- ► Common Lisp binding
- ► Eiffel binding
- ► JavaScript binding
- ► Kylix binding (LinCRT)
- ► OCaml binding
- ► Perl binding
- ► PHP binding
- ► Python binding
- ► Ruby binding
- ► Haskell binding
- ► C# binding
- ► Tcl/Tk Extensions
- ► Go binding

Additional Resources

- ▶ The Programmer's Guide to NCurses
- ▶ Programming with curses (O'Reilly)
- ▶ http://www.gnu.org/software/ncurses/ncurses.html