



Necessary Tool For NetOps

Boyd Stephens



And Who Are We/Am I?

(You May Be Asking)

NETELYSIS™



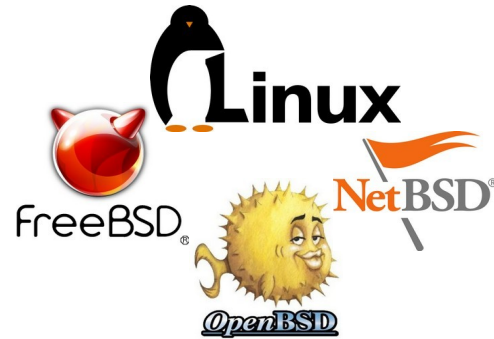
rev 0.5(~1999)



vs current offerings



Packet Plumber(s)



UNIX-like Operating Systems





MGMix

AUBix



NVIDIA

WELCOME

AIce
ALABAMA
CENTER OF EXCELLENCE

NVIDIA Deep Learning Institute Presents
The Fundamentals of Deep Learning Hosted by AIce

Attendees

TUSKEGEE UNIVERSITY AUBURN UNIVERSITY ASU TRENHOLM STATE COMMUNITY COLLEGE TALLAPOOSA COLLEGE

Partners

Alabama Power AUBix NVIDIA Mark III

WOW! HEPTAGON abacode EPIC ID point JENSEN CICE GRAY LINK



Defining a Few Concepts/Terms

- What is a terminal multiplexer?(ie Terminator, Screen, Konsole)
- sessions
- windows
- panes
- status line
- command line vs command mode vs prefix/key bindings

technical tid-bits

- tmux [-2CDINuVv] [-c shell-command] [-f file] [-L socket-name] [-S socket-path] [-T features] [command [flags]]
- tmux commands, command short-cuts, key-bindings
- `tmux list-commands`

creation/navigation sessions, windows and panes

- prefix and key bindings
- command mode - (:)
- new-session -s
- new-window -n, or c
- rename-session or \$
- rename-window or ,
- select-window -t – (0-9)
- next-window/previous-window - (n), (p)
- split-window -v, -h - (“), (%)
- select-pane -U, -D, -L, -R -(arrow keys), (o), (ctrl-o)
- display-panes or (q)
- display-sessions - “s”
- previous/next session - (“ and “)”

existing/detaching, set-options, and key bindings

- detach-client - (d)
 - kill-pane - (x)
 - kill-window -t - (&)
 - kill-session -t (command)
- set-option -g (mode-keys vi)
 - set-window-option -g
 - source-file command & tmux.conf
 - session:window.pane notation

more creation and navigation

- **zooming** – (z)
- transition pane-to-window - (!)
- moving windows between session - (.)
- join-pane -t, -s (command)

text buffers and copy mode

- enter copy mode - ([)
 - highlight selection & copy - (space), (enter)
 - paste selection - (])
 - capture-pane -b (buffer-name) -t
 - list paste buffers - (=)
 - save-buffer -b (buffer-name) path
- power of mode-key vi
(ie h,j,k,l,/,?,g,G,w,b,f,F...)
 - set-window-option -g
(history-limit n (number of lines))

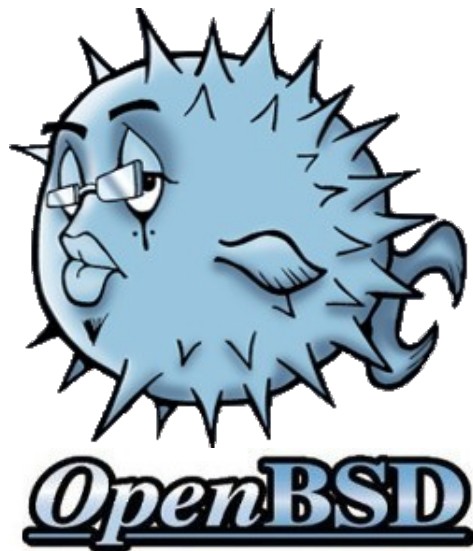
pair programming/programmability

- very interesting scenario with multiple ssh users on a development platform
- `tmux new-session -t oursession -s mysession`
(same user account)
- `tmux -S /var/tmux/pairprog`
(creating tmux session using sockets)
- `tmux -S /var/tmux/pairprog attach`
- `pipe-pane -t, -o` (similar to shell (script command))

extra interesting tid-bits

- set-window-option synchronize-panes on
 - send-keys -t session:4.1 'ls' C-m
 - has-session -t & shell variable \$?
 - set-option -g visual-activity on
 - set-window-option -g monitor-activity on
- list-keys (command)
 - prefix - (?)
 - man tmux

Special Thanks....



OpenBSD developers and particularly
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