

# GNU Screen: What?

A free terminal multiplexer by GNU.

# GNU Screen: Why?

## ■ Persistence

- What if terminal or X dies?
- What if SSH conn dies, or you want to logout without killing the process?

## ■ Multiple Windows

- Don't have to start multiple terminals!

## ■ Screen Sharing

- Allow others to just watch, or even contribute.
- Check in on a process running at home, from work/school

- It's cool. 'Nuff said.

# GNU Screen: Persistence

- Creating a session:
  - `$> screen`
- Detaching from a session:
  - `ctrl-a + d`
- Listing sessions:
  - `$> session -ls`
- Reattaching to a session:
  - `$> session -r [pid]` <--- "-x" if it's still active

# GNU Screen: Multiple Windows

- Creating a window:
  - `ctrl-a + c`
- Navigating windows:
  - next tab: `ctrl-a + n` -or- `ctrl-a + space`
  - previous tab: `ctrl-a + p`
  - specific tab (by #): `ctrl-a + #` (where # is 1, 2, 3...)

# GNU Screen: Multiple, Split Windows

- Splitting windows (for one on top of other):
  - `ctrl-a + S`
- Navigating between splits:
  - `ctrl-a + tab`
- Resizing a window:
  - `ctrl-a + ":resize #"` -or- `":resize +/-#"`

# GNU Screen: Sharing

- Viewing an active process:
  - `$> screen -x [pid]`
- Enabling other users to view:
  - `ctrl-a + :multiuser on`
- Add a user to ACL:
  - `ctrl-a + :acladd user2`
  - Then, they can:
    - `$> ssh user2@host`
    - `$> screen -s user1/sharedsession`

# GNU Screen: Sharing

- Changing permissions for others:
  - `ctrl-a + :aclchg guest -wx "#,?"`
  - `ctrl-a + :aclchg guest +x "colon,wall,detach"`
  - (makes guest only be able to view, not edit)
  - Owner can view connected displays:
    - `ctrl-a + :displays`

# GNU Screen: Misc

- Copy / paste contents:
  - ctrl-a + [ <-- copy
    - afterward, move cursor around, press space/enter to start highlighting, and again to stop, thus copying highlighted.
  - ctrl-a + ] <-- paste
  - ctrl-a + < <-- reads paste buffer from file
  - ctrl-a + > <-- writes paste buffer to file.

# GNU Screen: Misc

- Naming your session:
  - `$> session -S homework`
  - `$> session -r homework` (to resume)
- Customizing the tab bar (via `hardstatus` or `caption` in `~/.screenrc`):
  - `hardstatus string '%{= kG}[ %{G}%H %{g}][%= %{=kw}%?%-Lw%?%{r}(%{W}%n*%f %t%?(%u)%?%{r})%{w}%?%+Lw%?%?%= %{g}][%{B}%Y-%m-%d %{W}%c %{g}]'`
  - `hardstatus alwayslastline`
  - `caption always "%{wk}%-w%{+s kw} %t %{-}%+w %= %h"`

# GNU Screen: Resources

- <http://www.redhatmagazine.com/2007/09/27/a-guide-to-gnu-screen/>
- [http://gentoo-wiki.com/TIP\\_Using\\_screen](http://gentoo-wiki.com/TIP_Using_screen)
- <http://blogamundo.net/code/screen/>
- [http://en.wikipedia.org/wiki/GNU\\_Screen](http://en.wikipedia.org/wiki/GNU_Screen)
- [http://www.delorie.com/gnu/docs/screen/screen\\_toc.html](http://www.delorie.com/gnu/docs/screen/screen_toc.html)
- <http://www.pixelbeat.org/docs/screen/>
- [http://www.catonmat.net/blog/wp-content/plugins/wp-downloadMonitor/user\\_uploads/screen.cheat.sheet.pdf](http://www.catonmat.net/blog/wp-content/plugins/wp-downloadMonitor/user_uploads/screen.cheat.sheet.pdf)