Departmental Computing

Warning-1:

very boring talk...

Warning-2:

...one day it will save your life!

Peter Teuben - 5-sep-2017

Questions?

Computing Wiki
https://www.astro.umd.edu/twiki/bin/view/AstroUMD

Google / StackOverflow

Personal Computing

- Linux

- Mac (MINAU = Mac Is Not Always Unix)
  - Astrobetter
    http://www.astrobetter.com/wiki/Setup+a+New+Mac+for+Astronomy

- Windows (Cygwin, Ubuntu/bash)
  - Putty, VNC, VPN, ...

- Tablet (Android/IOS), ChromeBook
  - Skype, WebEx, Terminal/ssh, VNC, …

Department Computing

- Linux Cluster ("astro.umd.edu")
  - General (**earth**, **gaia**, algol, phoenix, mars, ...)
  - URSA (lab001 – lab013)
    - (some students will have separate accounts only here)
  - BORG/Yorp: special compute cluster
  - VizLab (vislab1, vislab2)   CMD: **grep vis /etc/hosts**
  - Email (USER@astro.umd.edu)

- Campus facilities
  - Deepthought2 (a very large linux compute cluster)
    -
  - Campus Wireless (eduroam, umd-secure)
  - Email (USER@umd.edu) and software services

"astro.umd.edu"

- Scientific Linux (sl67)
  - Command: more /etc/issue
  - Desktop: ???

- Red Hat (rh73)
  - Command: more /etc/redhat-release
  - Desktop: gnome 3 (is there an extensions issue?)

My Personal Checklist

- Compilers: C/C++/Fortran (gcc, gfortran)
- Tools: grep, awk, bash/tcsh, **cvs/svn/git**
  – **AstroUMD Git:**   https://github.com/astroumd
- Scripting: python, R, (csh/sh shell)
- Latex, LibreOffice
- Make / autoconf / cmake
  – ASCL: find any codes used in astronomy, e.g. MIRIAD via   **http://ascl.net/miriad**
  – Example of installing python 3.6.2
    •
- RSS reader (feedly)
- **VNC** / VPN

```
  ###  EXAMPLE OF INSTALLING PYTHON ###
wget https://www.python.org/ftp/python/3.6.2/Python-3.6.2.tgz
tar zxf Python-3.6.2.tgz
cd Python-3.6.2
./configure --prefix=/tmp
make
make install

# csh example
set path = (/tmp/bin $path); rehash
# bash example
PATH = /tmp/bin:$PATH
```

Your Environment

- Desktop:
  - Focus follows mouse (sloppy) (tap to click)
  - Timeout on screenlock > 1 hr
  - **Reverse** Scrolling (as opposed to **Natural**)
- Shell:
  - C-shell (tcsh)
    - .cshrc / .login file
  - BASH
    - .bashrc (interactive) vs. .bash_login (login) shell
    - Anaconda
- Editors: emacs (you may also like: vi, gedit, pico, ...)
- My personal unix bootrap environment: https://github.com/teuben/teunix
  - (sep 2017: this is being updated regularly now)