Setup Notes

Gnuplot Setup

Download latest Gnuplot version source code (4.6.0 at time of this writing):
http://sourceforge.net/projects/gnuplot/files/

Mac Gnuplot Setup

Short story: for legal reasons, Apple does not use ship Gnu Readline library by default. The replacement library does not have all the functionality needed for gnuplot, and this often causes errors.

1. Download the latest version of Gnu Readline: ftp://ftp.cwru.edu/pub/bash/readline-6.2.tar.gz
2. Untar it, `cd` to the new folder, and execute `./configure --prefix=/usr`, then `make everything`, then `sudo make install`.
3. Then cd into the gnuplot source folder. Use `./configure`, `make`, and `sudo make install`.

SPOCC Setup

1. Applied all Mac OS X Software Updates (Version 10.6.8)
2. Installed all Mac OS X Developer Tools (from the XCode Installer on the Mac OS X Application Install DVD)
3. Installed Python 2.7.2 64-bit
4. Installed Google Chrome
    1. Added http://699samiam.org/samwiki to bookmarks bar (also did to Safari)
    2. Enabled bookmarks bar
5. Installed Cyberduck 4.2.1
    1. Removed 3rd-party bookmarks
    2. Bookmarked SAMIAM-v
    3. Bookmarked LabCVS
6. Installed OpenOffice 3.3.0
7. Installed Text Wrangler 3.5.3
8. Installed GNU Readline 6.2
    1. Downloaded the source code for version 6.2
    2. From terminal, extracted contents of the .tar.gz file and used `cd` to go to the newly-extracted directory
    3. Executed `./configure --prefix=/usr`
    4. Executed `make everything`
    5. Executed `sudo make install`
9. Installed Gnuplot 4.4.0

1. Downloaded Gnuplot source code
2. From terminal, extracted contents of .tar.gz file and used `cd` to go to the newly-extracted directory
3. Executed `./configure`
4. Executed `make`
5. Executed `sudo make install`

10. Installed MacTeX (very long download; try to use the saved zip file from another SPOCC computer)
11. Installed SAM Data View
    1. "We are not going to use the standard installer (with the telemetry database, sample data, etc.) in the future. I did for this install, and I removed `~/SAM/gse` from the filesystem.
    2. There were some file permissions problems; I changed the permissions of ~/SAM to 755."
12. Installed XINA
    1. Extracted the downloadable zip file
    2. Renamed the newly-extracted folder to XINA, and moved it to the Applications directory
13. Set up password-free access to LabCVS (Note: For the following: let `LABCVS` be the IP address for the LabCVS machine, and `USER` be the username. I did not want to post either in public.)
    1. From terminal, executed `ssh-keygen -t rsa`.
    2. From terminal, executed `cat .ssh/id_rsa.pub | ssh USER@LABCVS "cat >> .ssh/authorized_keys"`
14. Did initial CVS configuration (See previous note about `LABCVS` and `USER`)
    1. From terminal, executed `export CVSROOT=":ext:USER@LABCVS:/labcvs/labcode"`
    2. From terminal, executed `export CVS_RSH=ssh`
    3. From terminal, executed `cd $HOME`
    4. From terminal, executed `cvs co spocc`
    5. Deleted existing copy of $HOME/.bash_profile
    6. From terminal (assumed to be in home directory still), executed `ln -s spocc/bash_profile_ref .bash_profile`
15. Exited and restarted terminal to let changes take effect.
16. Checked out gse directory from CVS
    1. From terminal (in home directory), executed `cvs checkout gse`
    2. From terminal, executed `cd ~/SAM; ln -s ../gse gse`
    3. From terminal, executed `mkdir ~/gse/data`
17. Checked out Python code from CVS
    1. From terminal (in home directory), executed `cvs checkout labcode/tmutil`
    2. From terminal (in home directory), executed `cvs checkout labcode/samutil`
    3. From terminal (in home directory), executed `cvs checkout labcode/tmdataflow`
18. Set up automatic updating (requires password-free LabCVS access; see above)
    1. Created alias to `~/spocc/update_spocc.command` on the Desktop, and renamed `CLICK HERE TO UPDATE SPOCC`
    2. Added `~/spocc/update_spocc.command` as a Login Item (updates CVS directories on login) : Under System Preferences -> Users -> Username -> Login Items -> "+" (Where "Username" is the SPOCC username).
19. Downloaded all SAM Data
    1. Created the following directories under `~/gse/data`: `data-2007`, `data-2008`, `data-2009`, `data-2010`, `data-2011`
    2. Downloaded data from 2007-2010 into appropriate subdirectories from ftp://samiam-v.gsfc.nasa.gov
    3. Downloaded all 2011 data directly from LabCVS (SAMIAM-V is out of date) into `data-2011` subdirectory.
20. Miscellaneous system tweaks
    1. Enabled Spaces
    2. Enabled Exposé (corner shortcuts)
    3. Increased mouse tracking speed, keyboard repeat rate
    4. Removed household applications (iTunes, iPhoto, etc.) from Dock and added newly-installed applications

21. Installed Microsoft Office
22. Installed Net Connect (by logging into http://vpn.jpl.nasa.gov.

Ops VM Setup

1. Applied all Ubuntu software updates.
2. Used Synaptic package manager to install the following packages and their dependencies:

- Development
  - cervisia
  - cvs
  - default-jdk
  - g++
  - g++-4.4
  - gcc-doc
  - gfortran
  - gfortran-doc
  - git-core
  - git-doc
  - subversion
  - qt4-designer
  - qt4-dev-tools
  - qt4-qmake
- Development (universe)
  - eclipse
- Libraries - Development
  - libgsl0-dev
- Mathematics (universe)
  - gnuplot
  - libgsl0ldbl
- Networking (universe)
  - filezilla
- Python Programming Language
  - python-numpy
  - python-numpy-doc
  - python-setuptools
  - python3.1
- Python Programming Language (universe)
  - pylint
  - python-argparse
  - python-gnuplot
  - python-scientific
  - python-scipy
  - python-scitools
- TeX Authoring
  - texlive-latex-base
  - texlive-latex-extra
  - texlive-latex-recommended
- Word Processing
  - enscript

3. Downloaded and installed Google Chrome.
4. Downloaded source code for Python 2.7.2. Compiled and installed with `make altinstall`.
5. Downloaded Pydev within Eclipse. :* Added Python2.7 interpreter.

Revision #1
Created 23 March 2023 15:01:45 by Nick Dobson
Updated 24 March 2023 13:46:57 by Nick Dobson