

Mac Software

Microsoft Office Installation

SLAC has a site license for office. Contact cpo to get an installation disc.

Anti-Virus Software Installation

Download Sophos anti-virus from <https://itservices.stanford.edu/service/ess/mac/sophos>.

NOTE: There have been 2 cases where sophos anti-virus repeatedly/intermittently appears to cause mac system hangs ("spinning beach ball of death") to the point where we have uninstalled the antivirus software.

These steps worked previously to recover from this problem:

- boot to "safe mode" (hold "shift" key down while booting)
- uninstall sophos by running the following program in Finder:

```
MacintoshHD->Library->SophosAntiVirus->RemoveSophosAntiVirus.pkg
```

- Reboot machine (don't need "safe mode" anymore)
- download/install applejack from <http://sourceforge.net/projects/applejack>
- boot to single-user mode (hold "apple" and "s" key down at same time while booting). this should look like a "terminal" (no fancy windows)
- type "applejack"
- select "a" (auto-mode)
- wait 15-30 minutes for fixes to take place
- select "r" to restart machine at end of applejack run
- reinstall sophos anti-virus from <https://itservices.stanford.edu/service/ess/mac/sophos>

Utility Software Installation (ase, pyplot, xmgrace, gimp)

The following commands will allow you to run xmgrace,pyplot,gimp,ase on your Macbook Pro Laptop **with MacOS X 10.6** (Snow Leopard). It's slightly different for other versions (talk to cpo). Office is also available for MACs purchased by SLAC (contact me if you want that).

Before doing the following, you must install:

1. "Xcode" from MacOSX CD "optional installs" (not "applications" CD) that came with your laptop (ask cpo if you don't have a copy)
2. "macports" from [here](#)

Then execute the following commands in a terminal on your mac (assumes bash shell):

```
export ASE_TAGS=https://svn.fysik.dtu.dk/projects/ase/tags/  
svn co -r 1574 $ASE_TAGS/3.4.1 ase-3.4.1  
scp youraccountname@suncat1sl.slac.stanford.edu:/afs/slac/g/suncat/mac/pyplot-0.11.tar.gz ~  
tar xvfz pyplot-0.11.tar.gz  
sudo tcsh  
port selfupdate  
port install grace gimp py26-gtk py26-matplotlib py26-scipy +gtk2  
cp -r pyplot /opt/local/Library/Frameworks/Python.framework/Versions/2.6/lib/python2.6/site-packages  
cp -r ase-3.4.1 /opt/local/Library/Frameworks/Python.framework/Versions/2.6/lib/python2.6/site-packages/ase  
exit
```

This "port install" command may take several hours (last time we tried: 6).

After completion of the above, include the following lines in ~/.profile (again, assumes bash shell):

```
export PYTHONPATH=/opt/local/Library/Frameworks/Python.framework/Versions/2.6/lib/python2.6/site-packages/:/opt  
/local/Library/Frameworks/Python.framework/Versions/2.6/lib/python2.6/site-packages/ase  
export PATH=/opt/local/bin:/opt/local/sbin:$PATH  
alias pyplot='cd /opt/local/Library/Frameworks/Python.framework/Versions/2.6/lib/python2.6/site-packages  
/pyplot; python pyplot.py; cd -'  
alias ag='/opt/local/Library/Frameworks/Python.framework/Versions/2.6/lib/python2.6/site-packages/ase/tools/ag'
```

Other Tips

- X11 can be started from Applications->Utilities->X11
- To enable ssh login to the mac, go to preferences->sharing and enable "Remote Login" (not many users will want to do this)
- To enable X forwarding, edit /etc/sshd_config and insert the line "X11Forwarding yes" (not many users will want to do this)

Lion Difficulties

Lion ssh X11 connections timeout, I believe because lion is using a newer version of openssh. Workaround: make an .ssh/config file that contains the following lines:

```
Host *
  ForwardX11Timeout 1000000
```

We have also learned that older versions of ag can cause the X11 server to hang (when opening up multiple windows quickly, like when opening an optimization?). Type **ag-devel** to pick up a new version that won't hang the X server.

At some point ag-devel stopped working as well. At that point we upgraded Jun to the latest Xquartz and it started functioning again.

When aleksandra upgraded snow-leopard to lion, several X applications stopped working. She manually deleted them ("drag to trash") and reinstalled.

Passwordless Login to Farm

(from Chuan Shi)

Hey, guys, I managed to get this working for the most part by following the instructions here:

<http://www.slac.stanford.edu/comp/unix/sshGSSAPI.html>

under "From non-SLAC machines to SLAC machines". It seems to work without the quoted fix at the bottom for OSX 10.6, as well. From what I hear, OSX 10.7 really messed up kerberos, so there might be some shaky behavior. Also, I have to run "kinit" every time I boot up my mac or every 24 hours to renew the token (whichever comes first), which is annoying, but not nearly as bad as typing out my password every time. There are workarounds to this, I believe, but after investigating/trying some of them, it seems a bit too wonky (at least it is on OS X, AJ, you might have more luck on Linux).