BACKGROUND

Pollen diagramming computer programs are not commonplace. The most frequently used program in the literature body is Tilia (http://www.ncdc.noaa.gov/paleo/tiliafaq.html), which was developed by Dr. Eric Grimm. Although widely popular, this program will run only on PC's from a DOS prompt, and is not free, costing users \$250. In 1992, the UC Berkeley Pollen Lab produced CalPalyn, a FORTRAN and C language program. CalPalyn runs on the more universal Unix platform and is free of charge to use. CalPalyn has not been made available to the general research community but has served many students well over the past several years. As part of my dissertation, I will update CalPalyn so it reflects more accurately current technological trends. It will have a Graphical User Interface and will run on both Mac and PC platforms. However, I am just scratching the surface with the new CalPalyn program (moniker TBA but I propose CalPalyn Too), so in the meantime we will continue to use the original CalPalyn program.

The original CalPalyn program ran on a now retired machine called *socrates*. I have moved the original program to a new computer, the OCF Unix machine. The OCF computer is housed in the Open Computing Facility (OCF), which is located in Eshleman Hall, in the basement. The OCF is student-led and student-run, so you should not expect consistent technical support, although in the past semester (Fall 2009), I have had a very positive experience with them. The students are very technically inclined and efficient in addressing questions.

If you have more questions about the OCF, see the website at:

http://www.ocf.berkeley.edu/

For general questions, staff@ocf.berkeley.edu

The most general address -- any questions about OCF accounts, services, or anything else not covered on the web site and Wiki should be sent here. Your mail will be seen by all of staff, so will usually be answered much faster than if you mail any one staff member. (And you may get a better answer, since all our staff members have different areas of expertise, and you may not pick the best one for your question.)

WHAT IS THE USERNAME AND PASSWORD!?

The POLLEN LAB has a group account on the OCF Unix machine. This means that you will use the same username and password as other students in the lab. I will verbally state the password to each of you, but it is bad etiquette for me to write the password down here. If you choose to write it down on your paper, that is fine.

username: calpalyn password: *******

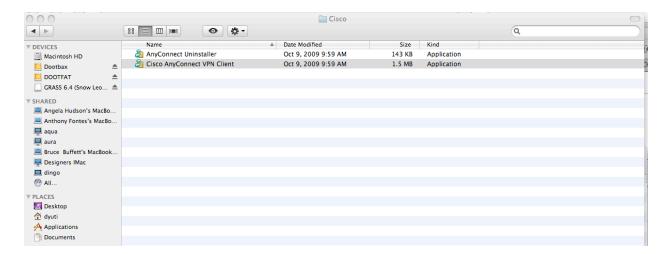
WHERE IS THE SCREEN to enter the USERNAME AND PASSWORD!?

This is why we are all here right now. CalPalyn is not yet a standalone application and you will need to log into the Unix machine discussed in the paragraphs above. Furthermore, there is a layer of security through which you will have to pass before you can log into the Unix machine. For the more graphically inclined:

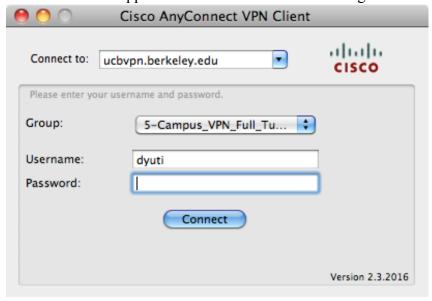
OS X ---> Connect to network via VPN (cisco folder) ---> ssh connect to OCF Unix box

The specifics of each component follow.

In the Applications Folder in the Finder, locate a folder called **cisco**. Open it, and find an application called **Cisco AnyConnect VPN Client** (example below).



Double click this application. You should see something like this.



In the **Connect to:** dropdown box, make sure the following host is typed in or selected (shown above):

ucbvpn.berkeley.edu

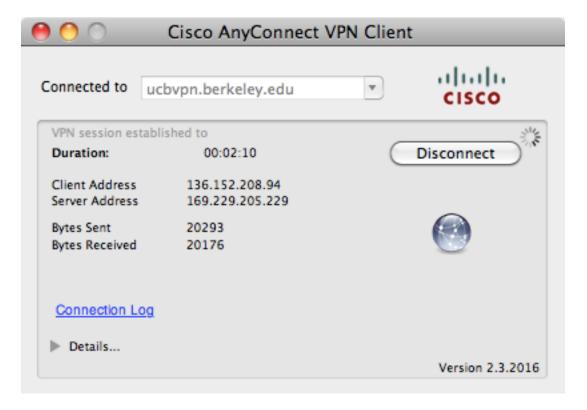
In the **Group** dropdown box, select 5-Campus VPN Full Tunnel v4 v6

Now you need to use your **Calnet** information to connect. This is important.

Once you enter the required information, select **Connect**. You should see a series of status messages appear on the screen, and a message in the upper right corner confirming a connection. If there are any errors, note them down carefully so we can troubleshoot. If the connection was successful, you should see the green and yellow Cisco icon in the upper right corner (below).



If you click on the icon once, you can "Bring AnyConnect to Front" to view the connection's progress.



Now you can connect to the Unix machine using the **Terminal** application.

Locate the **Terminal** application. It is in the **Utilities** folder.

▼ DEVICES	Name
Macintosh HD	 ▼ Iransmission ▼ Willities
■ Dootbax	Activity Monitor
DOOTFAT	Adobe AIR Application Installer
☐ GRASS 6.4 (Snow Leo ≜	Adobe AIR Uninstaller
- CHARED	Adobe Installers
▼ SHARED ■ Angela Hudson's MacBo	Adobe Utilities
	AirPort Utility
aqua	AppleScript Editor
aura	Audio MIDI Setup
Benjamin Levinson's Mac Bruce Buffett's MacBook	Bluetooth File Exchange
	Bluetooth Firmware Update
Count Chocula's MacBoo	Boot Camp Assistant
Dylan Saloner's MacBook	ColorSync Utility
@ All	Console
▼ PLACES	DigitalColor Meter
Desktop	Disk Utility
	Exposé
Applications	🧖 Grab
Documents	Grapher
▼ SEARCH FOR	Java Preferences
(-) Today	A Keychain Access
(L) Yesterday	MacBook Pro SMC Firmware Update
Past Week	Migration Assistant
All Images	Network Utility
All Movies	Podcast Capture
All Documents	RAID Utility
All Documents	Remote Install Mac OS X
	System Profiler
	Terminal

Start the **Terminal** application. A screen will appear. Enter the following comment at the prompt.

\$ ssh -l calpalyn ocf.berkeley.edu

This will connect you to the OCF Unix machine.

Enter the password when prompted.

Now you will get a mysterious prompt:

TERM = (xterm-color)

Enter:

TERM = (xterm-color) vt100

After some start up screens, you should see the Unix prompt.

apocalypse [1]

At the prompt, you can start calpalyn by typing apocalypse [1] analyze

The screen should clear, and you should see the following start screen.

Welcome to CalPalyn
The UCB Palynology Laboratory Pollen Analysis Application

Version 2.1 Running on ULTRIX 4.4 BSD Utilizing PostScript graphics

Answer the questions while referring to the manual Hit <return> for default answers shown in {braces}

Current path, from where this program is run is /home/c/ca/calpalyn Enter the name of your project