

UTEP DEPARTMENT OF GEOLOGICAL SCIENCES COMPUTING SYSTEM

4TH FLOOR COMPUTER LAB

Location: 409 of Geological Sciences Department

Users: This is a public computer lab, available to all UTEP students.

Computing equipment:

- 5 Mac desktops
- 16-18 PCs in teaching area. 6 more in outer ring area.
- 8 Unix terminals (sharing monitor, keyboard & mouse with PCs)
- 1 printer (black-white connected through the UETP printing system (i.e., the user has to pay). We're attempting to set up a class printing account, more announcements to follow.....

PACES (UNIX) COMPUTER LAB

Location: 305 & 306 of Geological Sciences Department

Users: Any student with a Department Unix account

Layout: 305 has 5 Unix terminals & 10 PCs, some sharing monitor, keyboard, mouse.

306 has only one PC, used for digitizing.

Computing equipment: Unix terminals allow you to connect to several Unix servers. The main departmental server is kisin. Other servers are Dr. Velasco's workstations: richter, benioff, love, & rayleigh.

- 3 printers
 - **Grande:** black/white laserjet (305)
 - **Crayon:** color inkjet (305)
 - **Chico:** black/white laserjet (306)
- 2 plotters
 - **djet/djet2:** Large format plotters
- 1 **scanner:**
 - Located next to **Crayon**, connected to a PC.
- Backup tape drives: available by request through the System Administrator (Carlos)
- Digitizing table: available for digitizing material using Unix software

305A COMPUTER LAB (UNDER CONSTRUCTION)

Location: 305a of Geological Sciences Department

Users: students working with Dr. Hurtado & Dr. Konter

Layout: TBA

Computing equipment:

- 6 Mac desktops
- 1 PC
- 1 color printer: TBA

HOW DO I LINK TO NETWORK PRINTERS?

The printers that belong to the PACES/Unix computer lab are Grande, Chico & Crayon (the names may show up in lower, upper or mixed case). Following the direction below, you can select any of these three printers, or djet (DJ), or djet2 (DJ2) plotters to print to. ***Please make sure when adding a plotter that you don't leave it as default printer - else you will be printing documents to a large format plotter.***

- PCs: Go to the **Printers & Faxes** control panel.
Double click on **Add Printer**. Add Printer Wizard shows up.
Select **Add Network Printer**.
Click on **Find printer in directory** button. A Find Printer window appears.
Select from either Grande, Chico, or Crayon, OR type in one of these names and click **Find**, for standard printing.

- Macs: Note that if you are working on a Mac provided by your advisor, you will likely need Administrator permissions to add network printers.
Go to your System Preferences panel (click on the apple icon in the upper left corner of your screen, System Preferences is located in the drop-down menu.)
Click on the **Print & Fax** icon.
If needed, click on the lock/unlock icon.
Click on the “+” button to add a printer. An new window will appear.
Enter one of the following IP addresses in the **Address** panel, as well as the corresponding **Name**:
Address: 129.108.20.202 (Name: Grande)
Address: 129.108.20.207 (Name: Crayon)
Address: 129.108.20.199 (Name: Chico)
Click the **Add** button.

HOW DO I SET UP NETWORK PRINTING ON PERSONAL COMPUTERS OR LAPTOPS?

First, you will need to be plugged in to an active Ethernet port within the Department, or you will need to connect to the UTEP wireless network. Often this will require also opening up a web browser and letting it direct you to the campus wireless login screen.

To add printers for your personal computer or laptop, you will follow the same process as above, except that when adding the printer on a PC, you will receive a prompt for your username & password. In username, type

paces\YourUnixUserName and your password for the PACES/Unix lab. If you don't have a Unix username, you will not be able to connect. You will have to request one from the System Administrator.

HOW DO I PROTECT MY WORK? (SECURITY & BACKUPS)

1. *SAVE OFTEN. SAVE OFTEN. SAVE OFTEN.*
2. Do not share you password with others.
3. Make sure that you thoroughly logout of a computer before leaving.
4. Try getting into daily/weekly/monthly habits of making backup copies of your work. There are several PCs with cd/dvd writers in the PACES/UNIX lab. Gigabit thumb drives also work well. When you get heavily involved in research, particularly if it involves a lot of computing, you may also want to consider investing in an external hard drive (~\$70-\$200). Try asking your advisor first though!!!

MISCELLANEOUS UNIX STUFF

You will each be assigned a Unix account (login & password) on the Department Unix server (informally called “**geo**”) to use throughout this course.

This account will provide you access to:

- 1) A Unix mail account (Unixlogin@geo.utep.edu)
- 2) A web directory on <http://www.geo.utep.edu/pub>
- 3) General storage

Change password: To change your Unix password, open a terminal window on one of the Unix computers and type in the following command. If you are on a Mac, open either the Terminal or X11 programs in the /Applications directory and do the same.

```
% passwd
```

You will then be prompted for your old password, and asked to type in a new password.

Mail: Most of you will want to get your “**geo**” Unix account mail forwarded to the university mail server (@miners.utep.edu). If so, let Carlos (montana@geo.utep.edu) know which mail address you want your geo mail forwarded to.

Web: Your web space will be on our local web server, under the pub directory and your Unix username: <http://www.geo.utep.edu/pub/Unixusername>

To upload web content to your web space, you will use FTP (more later) by connecting to <ftp.geo.utep.edu> and use your Unix login & password. If the PC you are using does not recognize <ftp.geo.utep.edu>, then type 129.108.20.22 as the server name.

Terminal printing: You can print to any printer or plotter from a Unix terminal as long as you follow certain conventions. For printers, the file content has to be of type text (ascii file) or postscript (.eps, .ps). For plotters, the file type has to be postscript. The files are sent to the printers/plotters by typing in the command:

```
% lp -d printername filename
```

where *printername* is the name of the printer (e.g., grande, powell, djet2, etc.) and *filename* is the name of the file you want to print.

Computers: Unix is available on all Unix workstations in the PACES/Unix 305 computer lab, and also on the Mac and PCs in 409.

- Unix workstation login and environment: The Unix screens display a login window with two possible configurations:

- 1) “Select server name” (followed by a list of servers the user can connect to)

- 2) “Enter user name” (followed by 4 tabs – OK, Start, Options, Help)

If you choose configuration 1), the server to connect to is kisin.geo.utep.edu. After a server is selected, you will be prompted with selection 2) configuration. For configuration 2), enter your user name and password. Note that no characters are displayed when entering the password. The screen displays a desktop with a task bar at the bottom, along with several icons allowing access to special functions (File manager, applications, etc.).

Logging into any server on the network will connect you with a common environment. Files stored in your home folder are available on all Unix servers. You may also have access to additional file storage areas – ask Carlos about this!

- Macs: Unix is accessible on Mac OS X computers through the X11 application (an implementation of the X Window System). You can log in to any Mac computer in 409 with your UTEP login, then launch the X11 application (may be hiding in your Applications folder) to open up a terminal window.
- PCs: PCs can run Unix through a program called CygWin. More on this later....

