

Getting started at the Demography Lab

Carl Mason
carlm@demog.berkeley.edu

rev 1.2 Fall 2011

Contents

1 Introduction	1
1.1 Getting a userid	1
1.2 Figuring stuff out	2
1.3 Things to be aware of when logging on to a Linux machine	2
2 Email	3
3 Working remotely	4
4 Wireless access	4
4.1 Printing	4
5 Statistical applications	5
6 Office applications	5

1 Introduction

Welcome to the Demography Lab. This document is intended to get you started doing science at the Demography Department.

1.1 Getting a userid

If you don't already have a userid and password, then you'll need to find Carl Mason (carlm@demog.berkeley.edu) and give him a signed *Statement of Compliance* – which you can download from:

<http://lab.demog.berkeley.edu/Docs/statementofcompliance.pdf>.

1.2 Figuring stuff out

In addition to this woefully inadequate document, you can find out how to do some things and how not to do others by consulting:

1. *The twelve most important Linux commands* - a some what longer introduction to Linux at Demography. <http://lab.demog.berkeley.edu/12important>.
2. The Virtual Lab wiki at <http://lab.demog.berkeley.edu/LabWiki> (focuses on using the lab remotely via FreeNX)
3. The Demography Lab FAQ, at <http://lab.demog.berkeley.edu/faq>. Most of the questions are of the “How can do this or that” variety.
4. Any of your new colleagues who might find in or near the computer lab.
5. The Web. Google for things like “introduction to Unix” or “Unix command line”. There are many different flavors of Unix/Linux but the vast majority of commands work the same way on all of them.

1.3 Things to be aware of when logging on to a Linux machine

Once you have a userid and password you can and should logon to a Linux workstation. You can find Linux workstations in both the basement lab and in the Library (the attic). If you are really important, than you might even have an office with a Linux workstation in it. All of the Linux workstations in the building work identically so just choose one with a comfortable chair in front of it.

Logging in is intuitive once you figure out how to turn the monitor on. The custom here is to turn monitors **but NOT computers** off when not in use.

If you have never used Linux before, it may take a moment to get used to the user interface. The key differences between it and those found on other operating systems are:

1. With Unix, it is often more efficient to type commands at the command line (also known as the *shell* or the *terminal window*) than it is to just point and click. This would be true of other operating system as well if they had command lines. To use the Linux


command line you simply launch a terminal window. How? go to: **Applications**→**System Tools**→**Terminal**.

If you strongly prefer not to be seen typing commands, don't worry Linux also has the usual pointy clicky tools such as a file manager (**Places**→**Home Folder** on the upper task bar).

2. Selecting and pasting can be done entirely with the mouse. Just select text with the **LEFT BUTTON** and paste it with the **MIDDLE BUTTON**. You don't generally use the menus or key combinations for cutting and pasting— except within certain applications.
3. The mouse **RIGHT BUTTON** generally produces a menu that is vaguely relevant to the place where you are clicking.

2 Email

Your email address is `your-userid@demog.berkeley.edu`. If you are a short term visitor to Demography and you already have an email setup that you like, you might just want to forward your `@demog.berkeley.edu` email to your existing address. This can be accomplished by simply creating a file called **forward** in your `mail/CONFIG` directory and making sure that that **forward** file contains ONLY the email address to which you would like all of your mail forwarded.

To process email on Demography Lab machines, you can use either **alpine** (**Applications**→**Internet**→ **Email**) or the email web interface at <https://www.demog.berkeley.edu/sqmail>. The latter is easier, the former more efficient. **Alpine** is a bit retro in that it's interface does not recognize the mouse. You'll get used to it in no time and wonder why you ever use that thing.

It is also possible to configure just about any other email processing program to access your demography email. Details and possibly helpful hints can be found in the **FAQ**.

Like any modern email system, ours does its best to filter out spam and viruses. The system also allows for a lot of automated email processing as well as automatic `.doc` →plain text translation.

The **FAQ** has more to say about this.

Please do not just ignore your @demog.berkeley.edu mailbox. Even if you can convince most of your colleagues to send email to your current/old email address, Important messages such as system maintenance announcements, department news, and business opportunities in Nigeria will be sent to you@demog.berkeley.edu.. The FAQ will tell you how to forward you @demog email.

3 Working remotely

Anything that you can do on a workstation in 2232 Piedmont, you also do from elsewhere in the world. There are no exceptions at least as far as computing is concerned. To continue your demography computing life remotely, only requires a computer with an internet connection (faster is better).

The fastest, cheapest and best way is to connect via the FreeNX client. This provides a complete desktop inside your PC desktop. It is remarkably fast and robust – even under not so great network conditions. See <http://lab.demog.berkeley.edu/LabWiki> for instructions.

It is also possible to install X11 server software and a secure telnet program. All of which are obtainable free. For instructions for Mac users See <http://lab.demog.berkeley.edu/Docs/PersonalComputerSetup/macSetup/ms.shtm> or for Windows users See <http://lab.demog.berkeley.edu/Docs/PersonalComputerSetup/windowsSetup/ws.shtml>.

4 Wireless access

AirBears is available in 2232 and 2224 Piedmont as well as nearly everywhere else on campus. AirBears requires a CalNet ID. If you don't have one of those, Liz Ozselcuk (elto@demog.berkeley.edu) help you secure either a temporary affiliate CalNet ID for you– or **a temporary AirBears userid**. To print to Demography Lab printers via AirBears require a little configuration effort.

Wired access is also possible by simply plugging into one of the hubs in the attic or the basement lab. **Please don't “borrow” a cable from a workstation.**

4.1 Printing

Printing from your portable is possible, after you manage to get network access. Instructions for setting up printing with AirBears are in at <http://lab.demog.berkeley.edu> under the Documentation menu.

5 Statistical applications

The Demography Lab primarily supports R, Stata, and Matlab. Other less common stat packages might also be available from time to time and if you want to write your own – C++, Fortran, Java, Perl, and Python are readily available. If you can't find a statistical tool you need, ask Carl Mason (carlm@demog.berkeley.edu) about it.

The preferred statistical package in the Demography Dept is R. We will spend a lot of time on it in Demog 213.

6 Office applications

OpenOffice is the most complete office package that runs natively on our Linux workstations. **Applications→Office→Word Processor** launches OpenOffice Writer. **Applications→Office→Spreadsheet** launches OpenOffice Calc; and **Applications→Office→Presentation** launches OpenOffice Impress. You can also type: `openoffice.org3 filename` at the command line or click on a file in the file manager to open an existing file.

Each of these programs is every bit as bad as the Microsoft[®] equivalents and each is very good about reading and writing files in the proprietary secret formats the keep Microsoft[®] rich.

There abiword and gnumeric are lighter weight spreadsheet and word processing programs available on the system. You can find them under **Applications→Office**.

Naturally we also support and approve of LaTeX. LaTeX is very different way to create documents. It is particularly well suited to the academic world, but it requires some effort to figure it out. We'll introduce it in Demog 213. You'll probably use it to write your dissertation.

If you absolutely must have MSWord/Excel/Powerpoint, we have them too: **Applications→Windows Applications→Programs**. Or type `winword`, `excel` or `powerpnt` at the command line.

But note: these Windows programs are being tricked into running under Linux. They show their disapproval of this by being even quirkiest and somewhat more treacherous than usual. Don't use them if you don't have to. Definitely save your work.