

Quick Guide to the Computer Science Lab in 103 Science

The lab contains a mix of Linux and Windows computers. Because you are taking a computer science class you have been given accounts on these machines. These machines have networked file storage shared among all the machines in the lab, and it safe to leave your files there.

You will have a login ID (also known as a username) which is all lower case and is usually:

- your last name if it is ≥ 6 letters
- otherwise your first initial followed by your last name
- for short last names it may be your first and middle initial followed by your last name
- or if that login is already in use by another student, some slight variation

Your initial password will be your student ID number (e.g. 050403). You should change this! Instructions are given below.

Using a Linux Machine

Logging In: The Linux computers have a login screen that says "USM Computer Science". These machines run the Ubuntu distribution of Linux. Use your username and password to log in.

Graphical Interface: The icon in the upper left corner will let you run programs. The "home" folder on the desktop will open the directory where your networked files are kept.

Terminal Interface: As a computer scientist you will sometimes need to use the simpler text interface known as a terminal or command shell. To get a terminal window, move the mouse to the bottom of the screen which brings up a quick access menu, and then click on the terminal icon. It will start up in your home directory, and you will use short text commands to work with files and directories. See below for a list of common Linux/Unix commands.

Logging Out: Click your name in the top-left corner of the screen and click "Logout". You can turn the monitor off, but never shut down a linux computer because other people may be logged in remotely.

Using a Windows Machine

Logging In: The Windows computers will say "Windows..." on the login screen. Use your username and password to log in.

Make sure to use the network drive to store your files: Do not store your files on the desktop or C: drive. Instead navigate to the H: drive, which will be your networked storage. For example in Eclipse, when starting up and selecting a workspace, click Browse > Computer > and Select the H: drive. Within that drive make a new folder for each course to use as your workspace for that course.

Logging Out: It is OK to shut down the Windows computers.

Changing Your Password

With a browser go to: jassid.cs.usm.maine.edu

Getting Help / More Information

Gift is the system administrator. He can solve problems with accounts or any other lab issues. If you ever notice a machine, printer, or network is not working. Email him at: gift.mngqibisa@maine.edu

The computer science wiki has instructions on logging in remotely and other topics at: wiki.cs.usm.maine.edu

Common UNIX Commands

Working with files:

ls	list files
ls -l	list files with "long" listing option
cp <u>src-file</u> <u>dest</u>	copy file
mv <u>src-file</u> <u>dest</u>	move file
rm <u>file</u>	remove file
mkdir <u>dir</u>	make a directory
cd <u>dir</u>	change working directory
rmdir <u>dir</u>	remove directory
cat <u>file</u>	type file to screen
more <u>file</u>	display file one screenful at a time
lpr <u>file</u>	print file
lpr -Pcolorp <u>file</u>	print file to the color printer
a2ps <u>file</u>	save paper by printing code smaller with two pages side-by-side

Java development:

eclipse	run the eclipse IDE
javac <u>File.java</u>	compile java application from the command line
java <u>File</u>	execute java class file from the command line

C development:

emacs <u>file</u>	text or program editor (Ctrl+X Ctrl+C to exit)
gcc <u>myprog.c</u> -o <u>myprog</u>	compile a C program and output an executable named myprog
<u>myprog</u>	run your program
gcc -g <u>prog.c</u> -o <u>prog</u>	compile for debugging
gdb <u>prog</u>	use the text based debugger
ddd <u>prog</u>	use the graphical debugger

Other commands:

Ctrl+C	terminate the current running process
man <u>cmd</u>	display manual page
man -k <u>keyword</u>	search man pages by keyword
exit	exit shell