

Computer Systems You Will Need to Know

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University of Minnesota Computer Accounts

There are three different computer systems that you will need to be familiar with:

[X.500](#) General email and directory information.

[IT Labs](#) Teaching and multipurpose labs, - predominantly windows.

[Math Department](#) Vincent Hall computer labs - predominantly UNIX.

University of Minnesota X.500 Account

- Your X.500 account is the one that you will use to navigate the university's bureaucracy. This will be your access to OneStop <http://www.onestop.umn.edu> and your university email account.
- It is highly recommended that you have different passwords for the X.500 account and the mathematics department account.

IT Labs account

In order to use any of the IT labs, you must activate your IT labs account. This is easy to do online:

<https://wwws.cs.umn.edu/account-management/>

Unix Password Password for the UNIX side of the IT labs, it can be the same as your Math Department password.

Windows Password Password for the Windows side of the IT labs, it can also be the same as your Math Department password.

You will need to reinitialize your IT labs account at the start of each semester. Be sure to backup the files from your IT labs account, they may be lost between semesters.

IT Computer Labs

The IT labs require a different login from the math department labs. Note that you may be assessed an IT Labs Fee for this account.

[Lind 24](#) The IT teaching lab, Windows/Linux.

[Walter103](#) Walter Library workspace, Windows/Linux.

[EE/CS 3-170](#) General Purpose Lab.

[ME 314](#) General Purpose Lab, Windows.

Your Math Department Account

- The math department manages their own computers and has set up an account for you. This account requires no additional fees.
- The operating system of the math department's computers is Linux, a UNIX clone. Get to know it.
- It is recommended that you have different passwords for your X.500 university account and your math department account.

Math Department Computer Labs

Vincent 5 The math department classroom lab, hard to get into.

Vincent 270D The graduate student lab, best computers in the department.

Vincent 314 The undergraduate lab, good computers and not too busy.

Vincent 504 Fifth Floor Lounge, two (older) computers.

- All department computers run *Linux*
- The door code for all the computer labs is - - - - *

Math Department Printers

<i>vinp005</i>	Vincent 5 Computer Lab
<i>vinp270d</i>	Vincent 270D Computer Lab
<i>vinp314</i>	Vincent 314 Computer Lab
<i>vinp426</i>	Fourth Floor Vincent North End
<i>vinp454</i>	Fourth Floor Vincent South End
<i>vinp502</i>	Fifth Floor Lounge (Rhombus Room)

Printer Guidelines

There is a printing quota of 1000 pages for graduate students.

- 1 Use the computer lab printers for large jobs.
- 2 Don't use the printers to do the copy machine's job.
- 3 Please pick up your job. Don't leave it in the printer.
- 4 If your job runs the printer out of paper, please reload the printer (and replenish the paper supply if necessary).
- 5 If the printer is low on toner, contact ADM.

Basic Unix

Many things in UNIX are done from a command prompt or shell. Here are the most basic commands you will need to get around in a shell.

`ls` Displays the contents of the current directory.

`cd` Changes the current directory.

`cp` Copies files.

`mv` Moves files.

`man` Gives you help about a command.

`pdflatex` Create a nicely formatted .pdf document from a .tex file.

Changing your password

X.500 password Your university wide password is used to check your email.. To change it, go to the <https://www.umn.edu/dirtools>, log in and select “change internet password” .

IT Labs password You set the password when you create your account. See the IT labs webpage for details:
<http://www.itlabs.umn.edu/>

Math Department password To change your UNIX password use the command `passwd` from a command prompt. This will ask you for your current password, then your new password (twice).

Don't give out your account password to anyone. This account is for your own personal use and is not to be shared. If you forget your math department password, contact ADM.

Email Setup

There are many email clients available for use in the math department. The two most common client are thunderbird and pine.

Pine A easy to use, console only email client. It is also setup to work by default. Type `pine` to access Pine.

Thunderbird A nice graphical email client. It is setup to work by default on our math accounts. Type `thunderbird` to access Thunderbird.

Others Many other email clients are available. Information about the various options can be found at http://www.math.umn.edu/systems_guide/email.html

Useful Software

Spreadsheets: The two most commonly used spreadsheets are OpenOffice (`ooffice`) and Gnumeric (`gnumeric`). OpenOffice can also read many Microsoft Office documents.

Web Browsers: The main web browsers in use within the math department are Firefox and Seamonkey. Others are also available.

Math Systems: There is a variety of math software available on the departmental computers. The most well known are Mathematica, Maple (`xmaple`), and MatLab. More specialized software is available too, and if you need software for your research, ADM will install it for you.

Viewers To view `.pdf` files we have Acrobat Reader (`acroread`) and `xpdf`. Postscript files can be viewed with `gv`, and `dvi` files can be viewed with `xdvi`.

Useful Websites

- IT Labs <http://www.itlabs.umn.edu> The entry point for all issues related to the IT labs. Here you can find a list of computer labs or get help locating software.
- OIT/ADCS <http://www.oit.umn.edu/> The OIT/ADCS webpage contains information about the university wide computer system. To log in with your central account, which lets you change your email settings, you can go directly to <http://www.umn.edu/login>. Other account information can be accessed from <http://www.umn.edu/dirtools>
- ADM http://www.math.umn.edu/systems_guide. ADM runs the math department computers. Visit them for help with the computing resources in our department.

Getting Help

- For help with the IT labs computers, you should contact the *Operator* by email (operator@itlabs.umn.edu) or phone (5-0876).
- Within the math department, the best and fastest way to get help is to contact ADM by email (adm@math.umn.edu) or phone (5-4895).
- Faculty and fellow students are also a good source of information, they have been using these computers for years.

Software for your home computer

The university has many software packages available for student use. Both **Matlab** and **Mathematica** are available for free to IT students. Many other products are discounted or free through **OIT/ADCS**, including Microsoft Windows and Office.

Homepage Setup

Type "homepage" at any shell prompt to install the latest stock homepage. This will create the proper links, and a basic home page (index.shtml). Your web directory will be located at ~/pub/html (from within your account) and contain a default file called index.shtml. To access your homepage from a web browser, go to

`http://www.math.umn.edu/~userid`

The University of Minnesota Academic/Administrative Policy 2.9.1 requires the following statement on personal and student organization pages: *"The views and opinions expressed in this page are strictly those of the page author. The contents of this page have not been reviewed or approved by the University of Minnesota."*

Text Editor

One of the easier text editors to use is `gedit`. Type `gedit` from a console to open the editor. Type `gedit file.ext` to open a file in `gedit`.

Exercise

- 1 From a console, change directory to your html home (`~/pub/html`).
- 2 Using `gedit` create a file called “`footer.shtml`” which contains the following

```
<p> The views and opinions expressed in this page are strictly those of the page author. The contents of this page have not been reviewed or approved by the University of Minnesota.</p>
```
- 3 Open `index.shtml` in `gedit` and replace the disclaimer with.

```
<!--#include virtual=/~userid/footer.shtml-->
```