A GUIDE TO THE COMPUTING FACILITIES WITHIN THE SCHOOL OF COMPUTER SCIENCE AND SOFTWARE ENGINEERING

THE UNIVERSITY OF WESTERN AUSTRALIA

Written by Ashley Chew and Jesse Ussi, January 2003
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This guide is designed to introduce new undergraduate students to the Windows, Linux and OSX computers at the School of Computer Science & Software Engineering; describe the login process and basic use of each operating system.

Windows XP Professional is the Windows operating system which has been deployed in this School due to its robustness and security as an operating system.

Fedora Release Core 6 is an open source operating system based on the Unix operating system, which is renowned for its robustness, security and reliability.

OSX version 10.4.8 (Tiger) is used on the Apple Macs. The laboratory is equipped with iMac G5 based on the BSD architecture, renowned for its user friendly Aqua interface.

The majority of the software used in the laboratories is available for students to download. Under Microsoft’s Academic Alliance program, students can download most Microsoft products and use them on their personal machines. Similarly, most of the software on the Linux systems can be downloaded for free as well. The notable exceptions are Microsoft Office and Matlab. These are available for purchase at the University’s bookshop.
**USERNAME AND PASSWORD**

Before you can logon to any of the computers in the laboratory, you will need a valid username and password. Your username and password should have been created for you prior to the commencement of tutorials. Students who transferred or enrolled late may face a delay getting their account. Accounts can not be created until the details have been processed by the central system.

Your username will be the same across the University, however your password will be different. To discover your username and password for CSSE, you can either use a computer in one of the second floor labs, or you can connect in remotely from outside.

From outside, find a computer and visit the web page:

https://secure.csse.uwa.edu.au/run/csentry?pw1=yes

There is a link from the current students page on the mail CSSE website.

On a lab computer, it will need to be booted into Linux (see below), then log in with the username “bookings” and the password “bookings” – All lowercase with no quotes. You will be taken directly to the page.

Click on “Step 1: Receive your CSSE account name and initial password.” and follow the prompts.

You will need to know your UWA Student ID and your UWA Pheme password.

After you obtain your CSSE account, you should also follow steps two and three to activate your student email account and allocate your tutorial and lab bookings.

You can now logon to any of the Lab computers in CSSE. The computer laboratories are located in the CSSE building in rooms: 2.01, 2.03, 2.05 and 2.07

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**PLEASE NOTE, YOUR PASSWORDS FOR LINUX AND WINDOWS ARE INITIALLY THE SAME. THE LINUX AND MAC SYSTEMS WILL USE THE SAME PASSWORD, HOWEVER YOUR WINDOWS PASSWORD IS ON A SEPARATE SYSTEM WHICH IS NOT SYNCHRONISED. IF YOU CHANGE YOUR LINUX/MAC PASSWORD, THIS WILL NOT AFFECT YOUR WINDOWS PASSWORD AND VICE VERSA.**
THE LABORATORY COMPUTERS

Laboratory 2.01

This lab consists of 32 G5 iMacs running 10.4.8 (Tiger). It has recently undergone refurbishment to include a projector and sound system. There will be casual work area at the front, available when the room is not being used for class activities.

Laboratories 2.03, 2.05 and 2.07

These laboratories all dual boot, allowing the user to choose either the Fedora operating system or the Windows XP operating system. This choice is made by the user at boot time.

The machines in the PC labs are all identical, only the number of machines in the labs change with 40, 30 and 20 machines in each respectively. Laboratories 2.03 and 2.05 are considered general access labs while 2.07 is primarily for students enrolled in applicable units.

Switching between Linux and Windows XP

All PC laboratories have dual operating systems that run either Linux or Windows.

To switch between operating system, the computer needs to be rebooted. Once the computer has rebooted, it will prompt the user to select either Windows or Linux. If a choice is not made within 60 seconds, the machine will boot into the default operating system for that laboratory. To change it, press a key and choose the desired operating system. Press the ‘Enter’ key and wait for it to boot into your selected operating system.

NOTE: IF THERE IS NO SELECTION MADE BEFORE A SET PERIOD OF TIME EXPIRES, THE COMPUTER WILL BOOT INTO THE LAB'S DESIGNATED DEFAULT OPERATING SYSTEM.
Turning on the iMacs

The iMacs drop into power saving mode after a period of inactivity. This can be indicated by the pulsing power light. To exit this, simply move the mouse or press a key.

If there is no power light, the power switch is on the back of the computer, on the left-hand side. Press it and allow the machine to boot.
LINUX

How to Logon to Linux

After a machine has completed its Linux bootup sequence, it will display the login prompt and you can now login.

Type in your username and press the Enter key.
Type in your password and press the Enter key or click on “ok”

You also have the option of choosing your desktop manager, which, typically, is KDE or Gnome. The option is under the Session menu at the bottom of the login screen. The desktop manager is responsible for how everything is presented, or better termed as the desktop GUI (Graphical User Interface). With Fedora Core 6, KDE and Gnome are similar, so it doesn’t really matter at this point. The default session is KDE.

How to Logout of Linux

Click on the bottom left most icon. This will bring up a menu, including the 'Logout' submenu. Click on 'Logout'. You will then be asked to select either: Logout or cancel.

Changing your Linux password

To change your Linux password:
Bring up a terminal window. (On the desktop or under system tools)
Type “passwd”
You will be prompted for your old password. (it does not appear on screen)
Enter your new password and then verify it.
You should see a message telling you your password has been successfully changed.
For example:

```
student@CSSE2301:~:515> passwd
Changing password for user student.
Enter login(LDAP) password:
New UNIX password:
Retype new UNIX password:
LDAP password information changed for student
passwd: all authentication tokens updated successfully.
```

The password format is strict. The password can not be based on a dictionary word, must contain a mixture of cases and characters.
The Linux Shell

In Linux, you can either use the command line or the GUI interface (like KDE or Gnome).

You will need to open up a Terminal window, so that you can enter commands.

To open up a Terminal window:
Click on the Red Hat icon in the bottom left hand corner.
Click on System Tools.
Click on Terminal.
A terminal window will now open up and you can begin using the Linux commands.

Basic Linux commands

- **pwd** - Present Working Directory
  You can find out where exactly you are in the directory hierarchy. Type the command pwd and then press the Enter key.
  Example:
  ```
  user01 212>pwd
  /home/year1/user01
  user01 212>
  ```

- **cd** - Change Directory
  To move between directories. It is important to know the difference between absolute and relative paths.
  An absolute pathname specifies the path in relation to the root directory, commonly known as "/".
  A relative pathname specifies the path in relation to the current directory that you are working in.
  If you type in cd without any additional syntax, it will bring you back to your home directory regardless of where you are situated in the file system.
  Example:
  ```
  user01 212>cd
  user01 212>pwd
  /home/year1/user01
  user01 212>
  ```

- **ls** - List Directory
  Lists the contents of directories. Type the command ls then press the Enter key.

- **cp** - Copy Files and Directories
  Copying the contents of directories/files.
  The syntax for the cp command is:
  ```
  cp [option] [source file/directory] [destination file/directory]
  [option] is a command line switch for options in regards to the copying of files/directories.
  ```
Example:
```
user01 212> cp -R /temp /temp2
```
This will recursively copy all files and directories in the /temp directory to the /temp2 directory.

- **rm** - Remove Files and Directories
  Deleting files or directories is done through the rm command.
  The syntax for the rm command is:
  
  ```
  rm [option] [File/Directory]
  
  [option] is a command line switch for options with regards to the deleting of files/directories.
  ```
  Example:
  ```
  user01 212> rm -Rf tmp
  ```
  This will recursively remove all files and directories in the tmp directory.

  **WARNING:**
The –f option will force the deletion of the files and directories. Be careful when using this option as you can delete your entire home drive.

- **rmdir** – Remove Directory
  You can also use the rmdir command, which will work only if the directory which you are trying to delete is completely empty.
  Example:
  ```
  user01 212> rmdir testing
  ```
  This will remove the directory called testing.

- **passwd** – Used to change your linux password
  Type the command passwd then press the Enter key.
  It will then prompt you for your old password and ask for a new password and confirmation.

- **lpr** - Printing
  When printing from the command line, we recommend using lpr.
  The syntax for the lpr command is:
  ```
  lpr -Pprintername filename
  ```
  Example:
  ```
  user01 588> lpr -P laser205 memo.txt
  ```

  **TIP:**
  TO GET MORE INFORMATION ABOUT ANY OF THE COMMANDS, USE THE MAN OR INFO COMMANDS.
  EXAMPLE: man lpr or info ls
Printing in Linux

You can print directly from your applications like Firefox, Open Office, BlueJ or Hugs.

- Click on File
- Click on Print
- Click on OK.

When in Linux, the computers in the laboratories will automatically detect which printer to print to. You can change which printer to print to by selecting the printer queue you want to print to. Table D shows the current valid printer names under Linux.

<table>
<thead>
<tr>
<th>Laboratory</th>
<th>Linux Printer Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lab 2.01</td>
<td>Laser201</td>
</tr>
<tr>
<td>Lab 2.03</td>
<td>Laser203</td>
</tr>
<tr>
<td>Lab 2.05</td>
<td>Laser205</td>
</tr>
<tr>
<td>Lab 2.07</td>
<td>Laser207</td>
</tr>
</tbody>
</table>

Table D: Lab Printer Names
**WINDOWS XP**

Logon to Windows XP

To log onto windows, press CTRL+ALT+DEL together to get to the login screen. An “Authorised users only” message will appear, click on OK or press the Enter key.

At the login screen, enter your username and password. Also, ensure that the domain is set to "UWA-CSSE". See the example below.

![Typical Windows logon screen](image)

Typical Windows logon screen
Log Off Windows XP

There are two methods you can use to log out of Windows XP:
Click on the Start -> Shutdown -> Log Off. Confirm you want to log off by selecting "Yes".

OR

Hold down the CTRL + ALT + DEL keys. Click on the “Log Off…” button. Confirm you want to log off by selecting "Yes". See below:

Choose “Log Off” to log out
Navigating around Windows XP

You can access most of your programs or data via the desktop icons. You can also access them by:
Click on Start.
Click on All Programs
Click on the program you would like to use.

Accessing your Windows home drive

You have an area on a Windows server, which is reserved for you to save your course-work related data to. To access your data on your windows home drive, simply double click on the H: (home) icon on your desktop.

Accessing your Linux home drive in Windows

As in Windows, all students have an area on a Linux server, which is reserved for them to save course-work related data to. To access your data on your Linux home drive, simply click on the Linux (home) icon on your desktop.

Printing in Windows XP

To print from any of the applications in Windows:
Click on the File menu.
Click on Print.
Select the relevant printer. Choose the printer in the lab you are in.
See Fig 5.8.1 for list of printers and labs.
Click on the Print button.

<table>
<thead>
<tr>
<th>Laboratory</th>
<th>Windows Printer Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lab 2.01</td>
<td>Laser201</td>
</tr>
<tr>
<td>Lab 2.03</td>
<td>Laser203</td>
</tr>
<tr>
<td>Lab 2.05</td>
<td>Laser205</td>
</tr>
<tr>
<td>Lab 2.07</td>
<td>Laser207</td>
</tr>
</tbody>
</table>

Windows printer names
iMacs

Logging on
To log onto the OSX computers simply enter your username and password at the prompt. The password will be the same as your Linux password, which may or may not be the same as your Windows password. Once logged on you will be able to see the Aqua interface.

Log Off
To log off the iMacs choose “Log out” from the bottom of the Apple icon menu.
EMAIL – WEB MAIL

Whether you are in Linux or Windows, or on a CSSE laboratory computer or connected to the internet from home, you can access your Email account.

Your email is stored on the University Communications Services (UCS) Student server and can be accessed via any web browser.

Your email address will be username@student.uwa.edu.au
Any email sent to your username@csse.uwa.edu.au account is automatically forwarded onto your username@student.uwa.edu.au account.

Computer Science and Software Engineering has no control over your email accounts. If you have problems, you will need to contact the UCS student support.

Before you can use your email, you will first need to activate your email account.

Activate Your Email Account

Before you can access your email for the first time, you will have to activate your email account. To do this, connect to the UCS “Activating Your University Email Address” web page and follow the instructions. The URL is: http://www.ucs.uwa.edu.au/web/students/email/activate
Accessing your Email via Web Mail

Once you have activated your email account, you can connect to your email mailbox.
If you are using a laboratory computer, you will have a Web Mail icon on your desktop. Double click on it to open up the UCS Web Mail Email Service.
Open up a web browser, like Mozilla, Internet Explorer or Netscape.
Enter the web address:

https://webmail.uwa.edu.au/

Press the Enter key. You will get a login screen as shown below

The UWA email login page

- Type in your username and password.
- Select Student from the Server drop down list.
- Click on the Log In button.

To read your email, click on either the “Email” icon on the left hand side, or “Inbox” near the top of the page and your email will be displayed.

You can now send, receive and manage your emails.

Email Help and Information
For more information on how to use email, accessing your email from home, changing your email password, viruses and much more, connect to the UCS Email services web site at:

http://www.ucs.uwa.edu.au/web/students/email

On this site you can get information on:
How to connect from home:
http://www.ucs.uwa.edu.au/web/students/access/access_from_home
How to change your password:
http://www.ucs.uwa.edu.au/web/students/email/using
QUOTAS

Disk Quota
There is no formal quota for undergraduates. Different units and projects will require differing amounts of disk space. If you exceed a “reasonable” amount of disk space, you may be asked to justify why you are using so much space. As a general rule, 50Mb is usually acceptable.

Print Quota
There is a print quota for each student. Each student is allocated 5 pages per unit per week. The quota does NOT carry to the next week if it has not been used.

If you are having problems printing, please contact Computer Support by email on:

support@csse.uwa.edu.au

Your printing quota can be viewed at
https://secure.csse.uwa.edu.au/printing If you need extra pages, please ask your lecturer or tutor to authorise it. Support can not automatically increase print quotas.
LABORATORY ACCESS TIMES

There is 24 hour, 7 days a week access to the computer laboratories during semester. Your student card should automatically provide access to the building and relevant laboratories. You may be requested to show your student identification after hours. If there is an issue with after hours access, please speak to one of the staff in the front office.

During scheduled laboratory or tutorial times, the computers are for exclusive use of the students timetabled to be in that room. If there are free machines, you may be permitted to use them, but please check with the tutor or staff member in charge first.
INTERNET ACCESS FROM LABORATORY COMPUTERS

The School no longer provides unrestricted network access for Undergraduates. This service is now provided by ITS on behalf of the whole University. The laboratory computers have unrestricted access to the former PARNet network (UWA, Curtin, Edith Cowan and Murdoch Universities as well as parts of the CSIRO). External access can be provided by using the central ITS proxy: proxy.csse.uwa.edu.au, port 8888.

Further information is provided at the ITS website:
http://www.its.uwa.edu.au/student
USEFUL WEB PAGES

The school has a large amount of information on its web pages and you should make yourself familiar with them. Some web pages that may be of immediate interest are:

http://undergraduate.csse.uwa.edu.au

The main page of undergraduate resources within the school.

http://www.csse.uwa.edu.au/faq

The School’s computing FAQ pages. Please check here before you ask a question.

Unit pages – Available off the undergraduate page. Each unit has its own page which will include links to assignments, help questions, lecture notes and other useful information

http://www.studentadmin.uwa.edu.au/welcome/student_connect

Student Connect – Central portal for students into Central Administration.
CONTACTING COMPUTER SUPPORT

The Computer Science & Software Engineering support team are happy to help anyone with problems. The preferred method of contact is via email. This goes to all members of the team.

The Computer Support email address is:

support@csse.uwa.edu.au

For emergency support, the support staff are situated in the following rooms:

<table>
<thead>
<tr>
<th>Support Person</th>
<th>Room Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laurie McKeaig</td>
<td>Room G 10</td>
</tr>
<tr>
<td>Ashley Chew</td>
<td>Room G 04</td>
</tr>
<tr>
<td>Ryan McConigley</td>
<td>Room G 04</td>
</tr>
</tbody>
</table>