Computing Facilities Manager’s Report
25 July 2002

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**Lab and Construction News**

**The Dungeon**

Three new labs have been built under the Physics Theatre, with a total of 58 new computers. Construction has now finished and computers are installed and the labs will be on-line and useable for the start of Session 2. The names of the new labs are piano, organ and clavier.

**The Eatery**

Two new labs have been constructed as part of renovating the Mechanical Engineering cafeteria, with a total of 42 computers. The bugle, pipe and piccola labs move moved into the Eatery. Construction has now very nearly finished and computers are installed and the labs will be on-line and useable for the start of Session 2. The names of the new labs are bugle and pipe.

There are still two issues outstanding:
• Problems with the delivery and installation of the air-conditioning units may mean that there are heat problems with the labs until the air-conditioning can be commissioned. We expect it to be commissioned by the start of session, though there may be several days delay. If there are delays, then we will be monitoring the lab temperature closely and temporarily closing them if necessary.

• The glass roof is subject to strong glare in the morning. Shutters are being installed to eliminate this, but they have not yet been installed and, depending how sunny/cloudy it is, there are several computers which may be unusable for several hours during the day. The shutters should be installed in the new few weeks.

Banjo (Thesis) Lab

The thesis lab has moved back from the Samuels Building into its original home on the ground floor of K-17 (where the bugle, pipe and piccolo labs had been). It is now online and usable. As part of the move and upgrade (see mention of woody below), the name has been changed to the banjo lab.

Booking terminals, skyterms, printterms

We are still surveying the market for appropriate small-cheap-reliable computers to act as booking terminals, skyterms (displaying the current allocations) and print queue display terminals in the labs. The primary requirements are that it be very small with no cooling requirements and no disc (it will boot discless across the net).

We had hoped to have these online in time for session 2. This has not happened. In the meantime we will be setting up a couple of old Hypertec computers to fill in that duty in a couple of the new locations.

Software Installs and Upgrades

Linux Upgrade (woody)

We have been rolling out the latest debian linux distribution, version 3.0, commonly known as woody. The main thing that should be noticed is that these computers will now have the current version of all the distributed applications. These include gnumeric, openoffice, mozilla, abiword, acroread, the gimp, dia and evolution.

Java

Java v1.4.0 is now installed as our standard java distribution. Older versions are still available (via /home/java) for people that need to use them.
New default window manager

We are installing a new default window manager which has a more “modern” look than the venerable twm. The new window manager is called fluxbox, is simple, lightweight and easy to configure.

FluxBox is a window manager that is based on the code from BlackBox. It is pretty lightweight and tries to leave you with as much screen space to yourself as possible. It provide multiple desktops, “tabs” (useful feature if you get to know it) and many other bits and pieces.

Features include:

• Configurable window tabs.
• Iconbar (for minimized/iconified windows)
• Wheel scroll changes workspace
• Configurable titlebar (placement of buttons, new buttons etc)
• New native integrated keygrabber (supports emacs like keychains)
• Maximize over slit option

This change of default window manager will affect anyone who has not specifically chosen a window manager (possibly by using the chwm command). If any of these people wish to switch back to twm, they can easily run the chwm command and follow the simple instructions.

Anyone else who wants to try fluxbox can use the chwm command to set up an initial environment.

New Systems

File servers

The server eno has been broken and off getting fixed for some time. In its absense we had taken the new server elfman (which has been Neil’s experimental server), plugged eno’s disks into it and rearranged the smoke and mirrors so that home directories on eno were still accessible.

eno has been fixed and is now back doing its job. elfman has now been commissioned as the school’s new fileserver. elfman has two filesystems of approximately 150 Gb (as two RAID-5 arrays with two discs available as hot spares, total of ten drives of 36 Gb at 15,000 rpm). This will give us enough capacity to reduce the load on all our surrent servers and have plenty of headroom for the next year or so.

The Windows Terminal Server

The new Windows server has been installed and been running for some time now. This replaces the wincenter server which is about to be turned off.
The new server is accessed via the command `win` (for windows, wits in the school are invited to institute their own aliases or acronyms). It has the full suite of Office applications, as well as acrobat, ghostscript, and other commonly needed apps that we are aware of that people might need. If there are things not currently installed that would be useful, please let me know and we will see what we can do.

**Other Windows options**

**OpenOffice**

OpenOffice is an open source package of applications which are generally fully-compatible, slot-in replacements for the Office suite. It derives from StarOffice. Particularly, Sun have done a similar thing with OpenOffice to what Netscape did with Mozilla. That is, the core technology is now an open source project, and Sun take a periodic snapshot of that development, wrap some “value-add” stuff around it, and sell/licence the resulting StarOffice. That is, StarOffice v6.0 is OpenOffice v1.0 plus a few Sun smarts. In practice, I can’t see what Sun have added to the package except for packaging (and telephone support, etc).

We are putting OpenOffice on all the upgraded School Linux boxes, either done already or will be installed over the next few days. We are also likely to be mirroring OpenOffice for others who want to install it; but the mirror is a bit tight for that at the moment. Anyone interested in OpenOffice on their own computer can fetch it from a low-cost archive near you (http://mirror.aarnet.edu.au/pub/openoffice/).

OpenOffice can be used to open individual Office documents (excel, word, etc) and so can be used, for example, to read word attachments to email message.

**CrossOver Office**

For occasions where OpenOffice is not sufficiently compatible, another option is CrossOver Office. This is a wine-based system with particular support for the Office suite, so that word, excel, etc run native on a linux computer (a set of libraries intercept the Windows system calls and emulate the Windows API). I have several licences for this if people want to try it.

**Separate Unix tools**

A number of these are available, offering varying degrees of compatibility with Office file formats. These include gnumeric, evolution and abiword.

**VMware**

VMware is also available when other windows applications must be run on linux workstations. This emulates a complete new x86 computer, which in turn can run Windows or any other operating system. We have been using it with qualified success for several teaching packages. It is probably not the best solution if the main interest is to access Office applications.
Colour Printers

For some years the School has had a high quality colour printer for final proofs and for (short) production runs of various school publications. We have not yet had easily accessible printers for staff and postgraduates to use for overheads and other colour printing needs.

We now have a plan to deploy several more modest colour printers around the school, and will be installing a HP4600 on the fourth floor which will be usable by all staff and postgraduates. Depending on the interest in, and reliability of this printer, I expect that we will buy another one or two similar printers during next year.