

# Networking Workshop Labs: Students, Staff and Technology

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## Abstract

In 2000, UNITEC Institute of Technology in Auckland, supported three stand alone networking workshop labs, an increase of one lab over the previous semester. The purpose of the three workshop labs is to provide a separate stand alone-networking environment that allows students to create, implement and test their own network. Limitations with three workshop labs and having to support ten different types of computing papers, in either the Bachelor in Computing Systems (BCS) or the Master in Computing (MComp), this generated a total of 26 classes, in turn creating support for 650 users.

Each workshop lab consists of 25 computers: one tutor computer and 24 student computers. Each computer comprises of one floppy drive, one primary hard drive, one CD-ROM, one removable hard drive caddie and one zip drive. There are also a total of 120 removable hard drives.

Owing to technology restraints these computers are only bootable to the primary or secondary hard drive. Therefore, some classes are setup on the primary hard drive and some classes are setup on the removable hard drive. Removable hard drives are configured as the secondary hard drive. The CD-ROM allows for installation of the operating systems software. The floppy drive is either used with a bootable disk or to backup data. The zip drive is used for backing up data.

At the beginning of 2001, having reviewed the previous year, some issues were raised by staff and students. There were also some technical constraints to consider.

Examples of these were:

- 1 One workshop lab was modified into a classroom.
- 2 Wide variation of number of users per class
- 3 A new BCS paper was introduced, Database Administration, comprising one tutor and 24 students, adding another 25 users to the workshop labs.
- 4 Adding to the BCS and MComp courses there was also the introduction of Microsoft Certified Systems Engineer courses (MCSE). These consisted of four classes with one tutor and 16 students, adding a further 68 users to the workshop lab, and only offered on Saturday and Sunday. This now means these labs are open 12 hours per day, 7 days a week.
- 5 Students require adequate access to their removable hard drives. A total of 16 removable hard drives were either stolen or misplaced, these were purchased in the annual replacement round. The hard drive caddies were never replaced as any brought new to date are not compatible
- 6 New staff were employed and required education in the operation of the workshop labs
- 7 An ongoing problem of CPU's, memory, keyboards and mice which were stolen from the workshop labs
- 8 External modems and networking hubs were required as extra resources for the workshop labs
- 9 The Information Technology Support Center (ITSC) offers support from their Help Desk staff. Examples of these problems were faulty CMOS settings, faulty hardware and faulty software configurations.

As a result of the technology restraints and the issues raising by staff and students, this poster will present a survey analysing the technology and teaching concerns to date. It will also recommend solutions