

## Victoria University Of Wellington *Te Whare Wananga o te Upoko o te Ika a Maui*



On Campus

Maryann Nesbitt,  
Integration Manager  
Information Technology Services

The Control Room

Bryan Ivamy,  
Security Supervisor  
Campus Care

### Victoria University of Wellington

With over 16,000 students coming to learn in the open environment vital to tertiary study, coupled with 1,300 members of staff, Victoria University of Wellington can be described as a thriving community.

The main campus is the Kelburn campus, right in the centre of Wellington, New Zealand's capital city - renowned for its vitality, strong retail, and cultural attractions. The campus itself is the size of a small town, and likewise offers a range of facilities including libraries, numerous cafes, theatres, a bank, pharmacy, book centre, travel agent, computer shop, crèches, newspapers, recreational and cultural facilities, and the University Marae, Te Herenga Waka.

### The University Environment

The University prides itself on the kind of environment that is open to its students. This philosophy involves 24-hour access to required resources, i.e. computer labs and science laboratories, relating to the courses a student is enrolled in.

Facilities Management is responsible for the planning, design, construction and maintenance of all university buildings and the associated plant and services. These responsibilities include the security functions for the campuses, using Campus Care staff and contractors. Security is a priority, and the University employs 12 full time operators. CCTV surveillance is also operated by Campus Care.

Victoria University commenced using Cardax access control and monitoring in 1990. The first site was Murphy Building, which houses several Schools conducting teaching and research in the commerce and administration disciplines. The objective was primarily to control access by students to computer laboratories.

Over the last decade, the system has progressively expanded each year to include all major

buildings on campus, together with alarm protection of many adjacent houses, owned by the University. In 1999, the University migrated from Cardax Command Centre UNIX to Cardax Command Centre NT, and this year to Cardax FT Series 5 Command Centre.

The system currently comprises twelve Cardax Commanders, with access control covering the 33 buildings over three sites, Kelburn Campus, Vivian St Campus, and the downtown campus of Rutherford House and Government Buildings. This corresponds to more than 200 doors for the 20,000 cardholders. The access control system is also used to control membership access to the University's Staff Club, the Recreation Centre Weights Room, and one University Hostel.

System operation is 24 hours a day. Campus Care monitor and process alarms, manage door overrides, monitor events, process cards for staff and contractors, and deal with staff enquiries. After hours, Chubb Security monitors and processes alarms, manages door overrides, and monitors events on the site. The Enrolment Office processes the cards for all students and deals with enquiries relating to student cards. Information Technology Services (ITS) manages the secure network that the Cardax FT Series 5 system resides on, and manages the application environment.

## **The Decision to Migrate to Cardax FT Series 5 Command Centre**

Cardax has followed a strong commitment to providing a path for Cardax users to employ the latest access control technology. Commander hardware based sites are now provided with the opportunity to adopt the head end of the Cardax FT Series 5 system, through the development of a specific software product – Commander Interface.

As a dedicated supplier and installer of Cardax, Circuit Systems Limited, of Wellington, were keen to be involved in one of the foremost migrations to Cardax FT Series 5 Command Centre.

The University was initially approached in April 2002, by Circuit Systems, to discuss Cardax's requirement for a field test site for the Commander Interface project. With Cardax's presence in the University sector, and Victoria University's large number of Commanders, the University was the ideal site for Cardax to have on-board. Victoria University was accommodating in being able to support Cardax as a field test site for a system that is so widely used, particularly in Universities in New Zealand and Australia.

The key reason for migration was the ability to reap the benefits of the more advanced, user-friendly Cardax FT Series 5 solution. At the same time, Commander Interface allowed the University to retain full use of their Commander hardware, thus leveraging previous investment. For new hardware additions, the site will be able to support Cardax FT hardware, fostering a progressive upgrade of solutions, in line with the development of new innovative products / features.

For Victoria University, the emphasis was moving the security application to a new software platform. Having the databases and Commanders on the main IT infrastructure of the University meant improved database maintenance and archival support.

The Cardax FT Series 5 system will also allow the University to provide considerable improvements in the timeliness of service to both students and staff. There will also be a substantial reduction in data entry workload and enquiry management by automating the management of access groups using data from the Student Administration System. In future, extracts from the Concept HRMIS system will manage access rights for staff and contractors. Other specific functionality of the system was also attributed to the decision to use Cardax FT

Series 5 Command Centre, such as the extensive reporting functionality supplying more information, faster.

Other points that were considered as reasons by Victoria University to migrate to Cardax FT Series 5 Command Centre included:

- Ability to pre-define areas within the system that group multiple doors together
- Improved ability to manage access for individuals to defined areas, rather than loading access separately for each door
- Ability to automatically populate Access Group membership to enable correct access
- Ability to use data from other systems
- Extensive, fast reporting capability
- Far quicker process to add cardholders
- Based on Windows 2000, it is part of the standard technology environment of the University
- Resides on a secure segment of the University's core network.

## The Migration Process & Recommendations

As the Cardax dealer for Victoria University, Circuit Systems had significant involvement in the migration process. As Cardax technical and installation representatives, Circuit Systems were involved in data migration, setting up Cardax FT Series 5 Command Centre, updating the University's processes, and training key personnel from the University. Cardax acted as support to Circuit Systems where required.

As the migration was a field test site, Cardax R&D were also involved in the process. The data migration process, within a University environment, was considered to be a learning experience,

**“We were impressed with the quality of Cardax’s technical team, especially during the data migration stage of the project,” says Maryann Nesbitt, Victoria University’s Integration Manager, and Project Manager for the migration.**

Victoria University handled the IT aspects of the project, and also managed the project exceptionally well. Having a key contact such as Maryann to manage and facilitate the project was essential. It is now recommended practice that a Project Manager be appointed as a point of contact to follow the migration project through. The University reviewed the way it manages operational policy on access to buildings and labs and this will lead to changes in practice over the next trimester. The Enrolment Office and the Campus Care team have a more co-ordinated approach to managing similar enquiries. The central ITS team are now providing a wider range of IT support services to the Campus Care team.

From a site review it was decided that the existing Student Administration database would be used as a source for importing student data, with student access designed around requirements of the courses they were studying. This meant that the data was freshly imported into the Security System, rather than being migrated from Cardax Command Centre NT. There was no existing export system for staff, so it was decided to use the Cardax migration utilities to directly transfer the staff records from the existing Cardax Command Centre NT into Cardax FT Series 5 Command Centre.

From Circuit Systems’ point of view, spending time designing Access Groups prior to migration is likely to result in saving time, and undoubtedly makes the process easier. Rationalising the

present system so it is less complicated (resulting in not too many access groups being created automatically) is also recommended. Victoria University experienced a huge improvement in their data quality, with a reduction from 30000 to 20000 cardholder records as a result of cleaning up the database.

**“The migration project had momentum and was a useful vehicle to improve management of the overall applications and commander hardware environment,”** comments Maryann.

“This included improvements to the server and applications environment, minor upgrades to the commander hardware and completing the switch of the commanders across to a secure partition of the University’s main network.”

A development server was built, with everything installed here and backed up, before being implemented on the main production environment. Initially, the Commanders were switched over one at a time so that the new system could be monitored, for several weeks. “Although this meant operating two security environments in parallel, the learning time for the Campus Care team in a restricted production environment was invaluable,” explains Maryann. The last 9 Commanders were switched over in one day.

”Do not underestimate the time and preparation required, and recognise that significant learning can take place in the time when the first Commander goes live,” says Maryann. Although it would have been possible for the migration to have been undertaken in less time, the pace was important to allow the operational teams to have a far greater understanding of their live environment. “Using the new environment involves understanding new concepts about data management and new ways of doing familiar tasks. The stress levels for both security and enrolment staff were far lower than they could have been for a project of this nature,” remarks Maryann.

The process is complex, and the field test highlights the importance of careful planning. Cardax now has a policy of Cardax training requirements and pre-requisites for dealers before they may undertake migration projects. These required standards are also reassuring to the site.

**“We see it as essential that our distributors were backed by Cardax,”** comments Maryann on the relationship between dealer and application vendor.

## **The End Result**

Cardax recognises the value of being able to work with a site such as Victoria University, and gaining significant feedback from a real world university environment. By having Victoria University and Circuit Systems involved in the development stages, Cardax gained expertise in the process to allow for changes that will help in the marketplace. The project has also allowed migration material and training to be developed that will be as helpful as possible for dealers and clients.

Victoria University has ensured they have kept up to date with the latest technology, by reaping the benefits of Cardax FT Series 5 Command Centre, while moving their Cardax system onto a more appropriate server environment.

**“We are confident that the University will receive significant benefits from a streamlined data management process during the next enrolment round,” says Maryann.**

The system is expected to result in service improvements, lower costs, and is very user-friendly.

**“Sweeping cardholders into pre-defined access groups automatically at the time of enrolment will reduce a huge workload,” says Maryann.**

Bryan Ivamy, Victoria University’s Campus Care Security Supervisor, comments:

**“In terms of performance, Cardax FT is awesome... even modifying cards is easier, it’s just drag and drop, and we have more control with access groups.”**

Cardax FT is more of a management tool, with report generation and bulk editing and changes being very straightforward.

The University has now started work on a business case to review their legacy hardware and to develop the use of Cardax FT over the next 5 years.

**For more information contact Cardax (International) Ltd**

Phone +64 7 838 9851 Fax + 64 7 838 9801 Email [sales@cardax.com](mailto:sales@cardax.com)

Or visit [www.cardax.com](http://www.cardax.com)

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