



**At a Glance:**

- Organization**  
 Established in 1973, Kristen supports approximately 1,700 students from K-Year 13. Currently maintaining a fleet of 1,300 computers, including over 1,000 laptops, Kristen is committed to information and communications technology (ICT) development for its students.
- Challenge**  
 Effectively managing a growing number of mobile computers while ensuring the delivery of up-to-date technology and learning methods to students.
- The Approach**  
 Finding an automated, multi-platform patch management solution to maintain and secure all systems and ensure all security updates are completed in a timely manner.
- The Result**  
 PatchLink Update™ has reduced the ICT Services team's hands-on involvement in maintenance as well as cutting user downtime.

## New Zealand's Kristin School Masters Student Mobile Computing with Streamlined Patch Management Process

Established on Auckland's North Shore in 1973, Kristin School has grown from 42 students to approximately 1,700 students spanning kindergarten to Year 13. In its 33 year history, the independent non-denominational, co-educational school has earned a reputation as one of New Zealand's premier educational institutions.

Kristin School is committed to staying at the forefront of information and communications technology (ICT) development to give its students the greatest possible advantages in the digital age. It maintains a fleet of approximately 1,300 computers, including over 1,000 laptops, with a school intranet that contains learning material and allows students to upload assessment work and have it reviewed online.

Students are introduced to a laptop program when they enter the Middle School (years 7 to 10), which involves purchasing a laptop for school and home use that is set up and maintained by the school's ICT Services Department. The school licenses all the software and maintains the licences for office and graphic software packages.

### The Challenge *Proactive Vulnerability Management versus Reactive*

Kristin School consistently seeks to provide up-to-date computer technology and learning methods. Students and teachers currently use IBM and Lenovo notebook PCs provided by the school with a standard software configuration to make it easier to deploy and manage over time.

Although the school was using Windows System Update Server to source and install updates, Director of ICT Services, Jason

MacDonald, had concerns about managing a growing number of computers. This led him to research more efficient solutions for maintaining the fleet of PCs throughout the school year. He soon concluded that Windows System Update Server wasn't streamlined or thorough enough for Kristin requirements, particularly when critical updates needed to be quickly distributed to the entire fleet of mobile computers with sporadic connection to the network.

"Updating software had become more of an issue, so we wanted to take a proactive approach to ensure our fleet of computers was best maintained, supported and secured," MacDonald says. "We looked at how we could keep software up to date and how we would respond if there were vulnerabilities in core pieces of software or breaches in our system."

*“ Responding to threats isn't our main focus... ”*

MacDonald found that very few products designed to manage security and software maintenance processes across a large number of computers handled both tasks well. Some packages could be useful for deploying software at installation, some offered reporting, licensing management and help desk features and some focused on the ongoing lifecycle of the standard operating environment.

"Responding to threats isn't our main focus, at this time the emphasis is on upgrades," says MacDonald. "We were already using Windows System Update Server and anti-virus applications and doing automated updates, but we wanted to manage all maintenance, particularly the critical updates, more efficiently."

## The Approach

### *Flexible Software Deployment and Maintenance*

The school needed a solution that could handle mass security updates across a network, installing new software and patches, and removing decommissioned software, with minimal interruption for each user.

"Once our computers were imaged, we needed a tool that saved us time on maintenance to keep them running smoothly, updated, uninfected and stable," explains MacDonald.

"Our users don't sit at the same desk all day, they move around the campus from class to class, so we needed something flexible that could handle their connectivity patterns."

Given the average user session at Kristin School is a 40–50 minute class, larger updates could pose a tricky challenge.

"It wouldn't do to have a download start in the middle of a class and slow down the user's system, only to be cut off when the user disconnects to change classes, and then start from scratch at reconnection," says MacDonald.

Armed with a refined list of requirements and research of software management tools, MacDonald approached several suppliers for possible solutions. Security was a critical consideration, but the winning solution also had to provide solid configuration management support, working within the IT Infrastructure Library (ITIL) framework, which Kristin's ICT Services Department relies on for the service and configuration management of the school's network.

When one of the school's suppliers demonstrated how PatchLink Update™ could meet all the criteria, MacDonald was interested. Kristin School installed PatchLink Update Server in April 2006.

*“ PatchLink can manage that sporadic connectivity as users go about their day moving on and off the network. ”*

Jason MacDonald  
Director of ICT Services

"PatchLink handles large updates quietly in the background. We can manage the amount of bandwidth it uses so that it has a low impact on users' normal network use. When they disconnect to change classes, PatchLink securely and efficiently continues on where it left off when they reconnect."

## ROI

### *Lowering Laptop Total Cost of Ownership*

The largest component of total cost of ownership for the school's fleet of computers is the maintenance of laptops. PatchLink Update has reduced the ICT Services team's hands-on involvement in maintenance as well as cutting user downtime.

"PatchLink is a good enabler of our ITIL initiatives, such as support for service management and configuration management," says MacDonald. "It also ensures we have a secure platform for computing. It helps keep our clients, network and users up and running throughout the school day."

*“ That PatchLink pre-tests patches for major applications is an advantage as this minimises the time from patch release to patch deploy... ”*

"PatchLink Update allows us to keep the users' software configurations up to date and secure, and frees us from the rigidity of standard update systems that only work through re-imaging or login scripts. That PatchLink pre-tests patches for major applications is an advantage as this minimises the time from patch release to patch deploy which is particularly good for security patches.

"This makes PatchLink a key tool for lowering the total cost of ownership of our laptops. By reducing these costs, we can spend more time working to provide tools and software to help staff and students achieve their educational goals. And, we can use PatchLink to deploy those changes securely and efficiently – so it's a win-win scenario for us."

Kirstin School is now in the position to use PatchLink Quarantine and PatchLink PDK if the need for sophisticated vulnerability countermeasure services becomes more pressing.

"I'm confident PatchLink will meet our school's future security requirements and will further provide time and cost savings as more users are connected," says MacDonald.