



Eaton and New Era IT: Supporting World Class E-Learning

Location: Auckland NZ

Segment: Education

“Pakuranga college prides itself on being a national leader in e-learning strategies. With 2,500 devices connected to their network at any one time, Pakuranga college knows how important it is to backup their critical systems and eliminate down time. The college chose Eaton’s UPS system to support their network and ensure that the teachers at the school can deliver their renowned e-learning strategies as seamlessly as

Founded in 1960, Pakuranga College in Auckland prides itself on being a national leader in e-learning strategies and modern teaching practices. Its 2,250 students embrace technology every day, bringing their own devices to school to enhance and personalise their learning.

Students and teachers have access to ultrafast broadband and a robust, monitored and secure Wi-Fi network. Learning platforms are accessed online, anytime, anywhere - allowing the school community to collaborate, create and share information with people from all over the world.

“With up to 2,500 devices connected to our network at any one time, we always strive to integrate technology seamlessly into the classroom and make it as invisible as possible for students and teachers to enhance their experience,” said Billy Merchant, Deputy Principal at Pakuranga College.

An early adopter of e-learning systems, Pakuranga College understands the importance of investing in its IT infrastructure – from upgrading technology right through to regular maintenance and repair.

Peace of Mind

IT services provider New Era IT has worked closely with Pakuranga College for the past five years, managing the school’s IT infrastructure. As part of its IT development plan, power quality is an important factor as bad weather and power outages can often cause disruptions across the region.

To protect critical systems and servers, New Era IT recommended upgrading the school’s UPS systems to ensure clean power to servers in a blackout and to allow enough time to back-up files and shut down equipment during extended outages.

“We had some instances in the past with other technologies where everyone arrived at school on a Monday morning and the servers were still down or had not come back up properly after a power outage,” said Billy.

“Everything from our Student Management Systems and teaching platforms, to our telephones and CCTV, rely on our network so we needed assurance that in the case of an emergency, our critical systems would be backed up.”

Solution

New Era IT recommended the Eaton 9PX 6KVA UPS for the upgrade project, which was installed over a one-day period during the school holidays to minimise any disruption to lessons.

“We chose this product as it provides more uptime than other UPS systems and better supports the server hardware that is now in the rack. It is also backed by intelligent power management software that allows for remote monitoring and management of devices from a single interface,” said Michael Askew, Engineering Manager at New Era IT.

Eaton’s 9PX with its double conversion topology, constantly monitors power conditions and regulates voltage and frequency, as well as isolating any incoming harmonic distortion, transient, and line noises that had previously proved to be harmful to IT equipment used in Pakuranga College.

With industry leading power specifications, including 40% higher efficiency and 28% more deliverable power than industry average, the 9PX offered significant savings in total cost of ownership by reducing power consumption compared to the old UPS.

With modular components that are hot swappable including batteries, network card, and the UPS, installation and replacement of these modules can be done at ease without dropping the load. The robust nature of the 9PX’s design contributed to the school’s lower MTTR (mean time to repair) value in its IT space as compared to what it was before.

Eaton’s Intelligent Power Manager (IPM) software provides Pakuranga College a unified platform to monitor its IT infrastructure, with means of full visibility of the UPS status, and any power event that is happening in the area that is affecting the school’s IT infrastructure. Alarms and information are easily reached to the IT manager and personnel via email notification.



Powering Business Worldwide

IPM's server protection function enables New Era IT to design a fully automated data protection and recovery scheme for the school. This is achieved by the seamless integration of Eaton's IPM with VMware's vSphere suite, providing IPM the control to gracefully shut down or migrate virtual machines, as well as shutting down hosts, or putting them on maintenance mode.

Trailblazers

Since the installation, staff at Pakuranga College believe the technology change has been seamless, with no outages or disruptions to their workflows.

"Since we installed Eaton's UPS, we have not had any issues with the servers. I personally take great comfort knowing that when the staff and pupils arrive on a Monday morning, everything will be running as smoothly as it should be," said Billy.

The school's virtualisation and physical IT infrastructure can now be restarted automatically once power from the grid is restored, and all UPS alarms cleared, thus reducing student wait time for server unavailability.

"If the power gets cut, we know the servers will be gracefully shut down in an emergency with the Eaton software platform. This confidence is crucial as we focus on being trailblazers in the eLearning and technology space."

Maintaining a large network that exceeds many NZ corporate offices and offers fibre connection to the internet and HD wireless points, has allowed Pakuranga College to encourage student creativity and support other schools on their technology journey.

"We have students who design and sell their own VR games. While another group of students has been working with the local vet to create 3D casts for animals. There is no doubt that it is the network that enables this great work to happen.

"We trust New Era's specialist expertise and knowledge to put forward the best advice for us – and the work with Eaton has been very effective in building our technical capability for the future," concluded Billy.

The conversation soon evolved from traditional UPS to other ways Panther Data and Eaton could help the College conserve power. With IT infrastructure hosted in suboptimal conditions, Eaton designed a fully integrated Micro Data Centre solution to enhance physical security and provide robust environmental controls. With in-built air conditioning, the system could be remotely managed, isolate individual power supplies and provide issue alerts and warning – making it the perfect fit to solve underlying issues whilst maximising network up-time.

Darryl Hall, IT Services Manager at Coomera Anglican College said the College has a clear purpose to inspire excellence in teaching, learning, service and faith.

"It's very refreshing to work with a company like Eaton who aren't just selling you a product. They evaluated and listened to our IT needs, invited us to their Brisbane experience centre for a live demonstration that showcased how the solution worked, and the quality and security benefits," said Darryl.

"The Micro Data Centre is a unique product that you don't see much in the education space but through this hands-on demonstration we could see its full value and how it would help us achieve cost savings by optimising our air-conditioning alone."

Before finalising its decision, the College looked into competitor offerings and how they stacked up against the Eaton solution.

"Our decision came down to service, functionality and knowing we would have a strong support system through Eaton," added Darryl.

Future-proofing education

With over 1,000 personal devices on campus, the College has future proofed its IT infrastructure to offer a seamless educational experience for both students and teachers.

"By installing Eaton's Micro Data Centre and UPS we are giving time back to teachers to spend with students and not worrying about the technology working – it's set and forget.

"It's one less thing to worry about, our IT resources no longer need to be assigned to monitor environmental conditions, instead they can be allocated to classrooms to help the College achieve its technology goals."

Over the next year Coomera Anglican College is looking at ways to innovate and enhance the education experience further – with plans currently underway for a secondary future focused equivalent to, The Pod. Technology and innovation are key elements of the project, which will build on the immersive learning investment made in the Imaginarium.

"Ultimately, Eaton has given us peace of mind thanks to ongoing annual maintenance and health checks. As we look to continue being a forward-thinking school Eaton is our number one technology choice for UPS solutions including the Micro Data Centre," said Darryl.

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November 2018