

ProCurve Networking by HP

Anglo- Chinese School (International)



"Working under tight time constraints, ProCurve Networking delivered a high-performance and cost-effective solution which enables us to offer an e-learning environment unrivalled in any other school in Singapore. It is the pride and joy of the school."

Mrs Goh Chi Lan
Executive Director
Anglo Chinese School (International)

Abstract

This case reveals how the Anglo-Chinese School (International) in Singapore used its IT infrastructure as a source of competitive advantage to deliver an innovative teaching environment to its broad student base.

The school sought a solution which would not only offer e-learning to a mobile student body but also meet tight budget and time constraints. The ProCurve Networking by HP solution provided value for money and excellent service. It equipped the school with the infrastructure to deliver its educational philosophy to an expanding student body.

Highlights

The new Anglo-Chinese School (International) determined very early in planning its flagship site that a dynamic IT infrastructure was to be a critical component in servicing the needs of its students as well as to support the school's daily administrative operations.

The school embraced an e-learning philosophy and made this central to the delivery of its educational programmes: learning was to be encouraged anytime, anywhere. The extensive use of IT was critical both in and outside the classroom. It would not only hone the students' computer skills and offer new methods of learning, but would also become a distinctive feature and value proposition of this premier institution.

Appropriate to the information age into which the young students were born the school integrates computers and the web in the learning process. Each student is equipped with a laptop and email account. In somewhat of a 'role reversal' the focus shifts away from the teacher and onto the student. Instead of a traditional classroom environment where information generally flows in a one-way direction, students at the school are encouraged to search for answers by doing research online during the course of the lesson. Homework assignments are made available on the school website and, if desired, completed work can be uploaded onto the same site.

E-learning is particularly relevant to a student body made up of a high percentage of overseas students. The school website is kept fully up-to-date with details of the syllabus and the supporting course work. In the event of a student being relocated abroad temporarily or looking to join the school from a foreign educational establishment with a different curriculum, he is able to keep track of current assignments and experience a smooth integration into the class.

The IT Challenge

The particular demands of the school called for a flexible, highly available secure infrastructure and to make this available over high-speed wireless LAN that could provide tight security, scalability and manageability for its users. Typical to most educational institutions, budgets were tight and delivery and installation timeframes were even tighter. The tender documents called for a six week deadline.

Bids were submitted by four parties: ProCurve Networking by HP, NEC, SCS and Cisco. The contract was awarded to ProCurve Networking by HP.

Mrs Goh Chi Lan, Executive Director, Anglo-Chinese School (International), commented: "ProCurve Networking was in a league of its own. For a start, it delivered real value for money providing an infrastructure that was between 10 to 15% less than its competitors. But what really swung it for us though was the true Lifetime Warranty that comes with ProCurve products. We knew that we would get support when we needed it and that ProCurve Networking had offices and a good network here in Singapore."

ProCurve Networking proposed an end-to-end HP solution, including servers, switches and software, thus providing the school with the reassurance that their network would be standardized on one supplier with both a strong local presence and a strong reputation.

Customer at a Glance

The Anglo-Chinese School (International) in Singapore opened its doors to students for the first time in January 2005. The private school is a co-educational institution which caters for both Singaporeans and foreign students who are attracted to the Singapore system of education.

The school currently has 170 students of which 70% are Singaporean nationals. The remaining student body hails from across the world and includes China, Korea, the Netherlands and Vietnam. Students are aged between 13 to 19 years and with a teacher-student ratio of 1:20 the school aims at providing high levels of individual attention.

The school is the newest addition to the Anglo-Chinese School (ACS) family of six schools which have shaped the lives of hundreds and thousands of students since 1886. Traditionally an independent boys' school, ACS believes in providing an all-rounded education, imbued with Christian values and principles. The schools have a total enrolment of more than 8,200 and have a reputation for producing many of Singapore's outstanding leaders, entrepreneurs and sportsmen.

In addition, ProCurve Networking had an impressive track record with similar deployments at other educational sites including a recent new network installation for Hwa Chong Institution, another leading school in Singapore.

ProCurve Networking teamed up with the systems integrator eSpore to provide expertise in overseeing the installation. ProCurve Networking's manufacturing facility in Singapore was a significant advantage when

it came to meeting the tight deadline. The equipment was delivered to the school within a week of winning the business. The network was installed and fully operational by Christmas, in time for the school's opening in early 2005.

Mrs Goh commented: "I was quite taken aback when the whole installation went so smoothly. There were no hitches and it was a very stress-free experience. All in all, I'd say we had a very positive experience of working with ProCurve Networking."

The newly installed network included a high speed 2Mbps broadband connection to local ISP NetPlus. Security was a high priority, especially as students are issued with individual laptops. A secure gateway firewall was installed to manage the total network security between different segments such as the student, the teacher or the internet.

Two redundant network core switches were used to provide fast and reliable switching between different network segments. A wireless access point was placed in all the classrooms, laboratories & common areas for easy access to the school network and the internet. Distribution switches were installed to serve the users and the wireless access points in each of the school's building blocks. Redundant fiber optic cables linked the distribution switches to the core switches for higher availability.

From the outset, the new network was designed for growth with initial population of around 200 users. However, the network has the capacity to support continual growth year-on-year up to over 1200 users.

eSpore will complete the second phase of the project by May 2005 when two more blocks and additional floors of the school building will be ready for use.

Mrs Goh added: "For us, the new network has been worth the investment. There is no doubt about it. It is now one of our big selling points for both foreign and local students."

Business Benefits

ProCurve Network's highly dynamic and secure infrastructure has allowed the school to deliver on its innovative educational philosophy

Value for money: cost savings on competitive solutions, product lifetime warranty, free software upgrades

Peace of mind in particular on scalability, security, availability and service and support.

About ProCurve Networking by HP

The ProCurve Networking business unit of HP is a supplier of enterprise networking solutions comprising wired and wireless networking products, services and solutions – including WAN routers, Ethernet switches, routing switches, wireless access points and network management applications – which allow customers to build networks based on open standards that meet current and future needs for security, performance and reliability.

The ProCurve Networking Adaptive EDGE Architecture™ is a unique design strategy that creates a secure, mobile, multi-service network by placing intelligence at the edge—where users connect and policies are enforced. This innovative approach creates a dynamic network infrastructure designed to keep up with advancing technology and user needs while protecting business investments.

What Makes it Work

Hardware

Network Core Switches

- HP ProCurve Switch 5308xl (8 slots)
- HP ProCurve Switch xl Mini-GBIC Module (4 slots)
- HP ProCurve Switch xl 100/1000-T Module (4 ports)

Network Distribution Switches

- HP ProCurve Switch 2824
- HP ProCurve Switch 2626/2650
- HP ProCurve Switch 2626-PWR/2650-PWR

Wireless Access Requirement

- HP ProCurve Wireless Access Points 420 WW
- HP ProCurve Secure Access Controller 720wl
- HP ProCurve Secure Access Controller Server 760wl

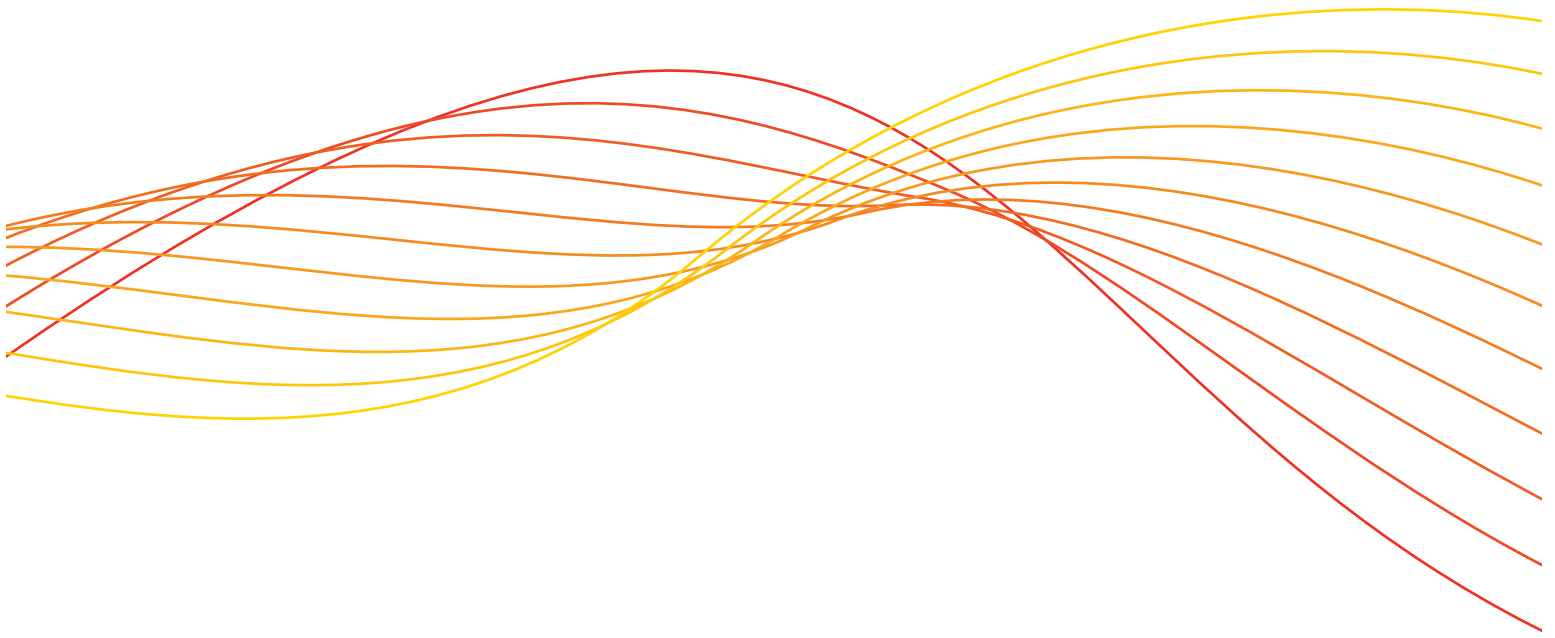
Software, Services & Support

- Lifetime warranty with next day advance replacement*
- Software updates, Telephone and email technical support**
- Comprehensive network design and configuration services **

*available in most countries, on most products for as long as the original customer owns it.

**The ProCurve Routing Switch 9300m series and Secure Access 700wl series have a one-year warranty with extensions available.

**for the most up to date information go to www.procurve.com.



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