

Location: Henley Beach, Australia

FOUNDED: 1958

STUDENTS: 900

INDUSTRY: K-12 Education

VALUE ADDED RESELLER:
ASI Solutions



Henley High School Overcomes Space Limits and Improves Communications with the Help of 3Com



CASE STUDY

IN BRIEF

GOAL

- › Increase speed and access to networked resources
- › Extend high-performance connectivity where no space is available for computer labs
- › Enhance productivity by enabling staff to more efficiently use and manage the school's communications network
- › Cost-effectively upgrade the school's wireless network to build a foundation for meeting current and future needs

SOLUTION

- › 3Com Wireless LAN Switch WX1200
- › 3Com Wireless LAN Managed Access Point 2750
- › 3Com Wireless Switch Manager
- › 3Com Switch 3870
- › 3Com Switch 3848
- › 3Com Baseline Switch 2816

RESULT

- › Reliable and fast connections to network resources
- › Secure wireless networking to support mobile and remote users and new laptop-equipped computer lab
- › VLAN functionality to enhance traffic control and security
- › Simplified implementation and maintenance of robust network for enhanced productivity of IT staff and reduced costs

SNAPSHOT

Secure, Fast and Flexible Wireless Network Solutions Economically Meet Implementation, Performance and Management Requirements

Henley High School, a Special Sport School in the Adelaide metropolitan area, offers comprehensive sports programs to its 900 eighth- to twelfth-grade students. There is no room to expand facilities on the existing school site in the picturesque seaside suburb of Henley Beach, so the high school's IT department sought to resolve its current and future communications needs with a wireless network. Henley staff chose a 3Com® solution to cost-effectively deliver reliable, scalable and easy to setup and maintain networked services. Today the school community enjoys the speed of 3Com Gigabit switching, the security and reliability of a 3Com Wireless Mobility System and the convenience of 3Com Power over Ethernet (PoE) solutions, all in a standards-based design that can grow to match school needs and budget.

CHALLENGES

Henley High School's five computer labs were not providing the school community with sufficient access to advanced technology and information resources. Site limitations, however, narrowed the number of options for expanding the school's infrastructure. As a result, school staff decided to create a portable computer lab that could be taken to students in their existing classrooms.

For network access to a new 20-laptop lab, the school required an enterprise-class wireless solution that would ensure fast, secure and continuous access to applications from all the main classrooms. Unfortunately, the school's existing wireless network—a few standalone D-Link wireless access points—lacked the reliability to meet connectivity needs and also was incapable of interworking with managed switches that could offer virtual LAN (VLAN) functionality. In addition to these challenges, the school's IT staff needed a solution that delivered maximum reliability and required minimum installation and maintenance effort.

WHY 3COM

Henley High School staff were familiar with the high value of 3Com technology. The core of the school's network used 3Com switches that had proven themselves to be effective and economical. This prior 3Com experience and the company's status as a preferred supplier of the the South Australia Department of Education and Children's Services, prompted a request for a wireless network solution configuration to 3Com through its Partner, ASI Solutions. The resulting design was chosen by Henley High School for implementation because it provided not only high-value wireless, core and edge switches and managed access points, but also a range of advanced

“I have worked extensively with 3Com networking products over the years and have always found their products reliable and easy to use. They are priced and featured competitively, and work out of the box with minimal set up time.”

Andrew Dodd
Network Manager
Henley High School

features, such as Identity-Based networking and Power over Ethernet, at an affordable price point. In addition, implementation services and post-installation support from ASI Solutions, a 3Com Gold Partner, impressed the school’s IT staff.

Complete network coverage spanning the main school buildings is provided by a 3Com Wireless LAN Switch WX1200 solution with six 3Com Wireless LAN Managed Access Point (MAP) 2750s. The 2750 MAPs support 802.11 a or b/g standards and deliver speeds of up to 54 Mbps, enabling students to access the network without compromising network performance. The systems receive their power from standard PoE cabling, freeing electrical outlets for other devices.

Wireless components, as well as all of the school’s routers, connect to a 3Com Switch 3870 Gigabit solution that was installed at the core of the school’s network in the first phase of the project. The switch with its auto-VLAN assignment capabilities was easily configured to provide three VLANs to control traffic and secure network access. To ensure fast connections and downloads, Gigabit connectivity extends throughout the school via two 3Com Switch 3848 and multiple 3Com Baseline Switch 2816 devices.

Once the initial hardware installation was completed, including wiring the MAPs to the switches in the server room, the new wireless network was soon fully functional. “Using the 3Com wireless switch and the wireless switch management software, our new wireless network was set up in a matter of hours once the physical rewiring had been completed,” said Andrew Dodd, Network Manager, Henley High School.

Using 3Com Wireless Switch Manager software, IT staff conveniently manage the school’s new wireless network from any wired or wireless computer in the school. The application lets staff establish user profiles with ease, configure multiple access points with a single keystroke and track users’ locations by MAP. It flags and blocks unauthorized access attempts and rogue devices to protect users and network resources. And should an access point fail, the software automatically transfers users to another access point without dropping the connection, giving students and staff maximum reliable, seamless connectivity.

The 3Com solution is successfully meeting Henley High School requirements, improving communications for staff and students by:

SIGNIFICANTLY INCREASING PERFORMANCE

3Com Gigabit switching solutions have increased the speed of connecting to the network and downloading content. Each day, administrators, office staff and students can work faster and accomplish more.

REDUCING EXPENSES

3Com system management applications decrease the time and effort required for management activities and optimize the effectiveness of IT staff members. Faced with fewer technical issues, they no longer need to spend valuable time troubleshooting basic faults. Many outsourced services can now be completed by school personnel and previously time-consuming tasks can be done more efficiently. PoE capabilities eliminate the need and the expense of installing additional electric outlets and cabling to support access points. IT staff are freed to focus on maximizing the performance of both the wired and wireless systems and controlling access to them via differentiated configurations for staff and students. Simultaneously, the 3Com solution lets budgets be stretched and network performance and security enhanced to further Henley’s education programs.

LOOKING AHEAD

Powered by its 3Com solutions, Henley High School today offers students and staff the dependable, high-speed networking services they require. In the coming months wireless network access will be extended, offering safe connectivity to students with their own portable computer devices. And as one success builds on another, the school community can confidently launch new applications. “The support that 3Com offers, including software updates and telephone support, has been really good,” said Paul Lendrum, IT Coordinator, Henley High School. Looking ahead, Henley High School faces a future uncluttered by uncontrollable costs and complex technology solutions. 3Com has helped clear the way for continuing a tradition of education excellence.

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