Chisholm Catholic College deploys new wireless system

Since deploying a wireless solution from Aruba Networks, Chisholm Catholic College has benefited from a fully autonomous wireless system.

THE CLIENT

Chisholm Catholic College is situated approximately 6 kilometres north-east of the central business district of Perth, Western Australia. The College provides education for years 7-12 with over 1,700 students. Each staff member is equipped with their own laptop computer for use on and offsite and the College has over 1,100 computing devices consisting of approximately 600 mobile laptops and tablets. The College computing programme is implemented by the Systems Manager with support from College ICT technical staff.

THE CHALLENGE

With approximately 600 mobile computing devices to manage, the College's existing wireless local area network was being stretched to capacity and was not able to deliver a good user experience. With limited IT personnel and resources, it was imperative for the College that its new wireless network infrastructure be easy to manage after initial deployment.

Security was of upmost concern to the College requiring tight control over who is allowed onto the network, where they can go and protecting against network intrusion – not only from outside the College, but from the College users themselves. Another concern was high availability ensuring that all devices would be able to maintain consistent connectivity across the Campus.

The College was keen to ensure that deployment costs be kept low and that existing wireless and network infrastructure be leveraged to ensure their investment be protected for years to come. Other requirements included the ability for guest wireless provisioning on demand, a good technical support infrastructure in place, high density deployment capability of the wireless access points and air performance of the technology (throughput and signal strength).

THE SOLUTION

Systems Manager Tony Ta said Chisholm College decided to deploy an Aruba Networks wireless solution. "After trialling a selection, the Aruba Networks wireless solution was found to give the best wireless performance for the testing site," he said. "Another deciding factor was the ease of installation which resulted in a more rapid deployment and I found that technical support for the Aruba evaluation equipment was very accessible with queries answered and different technologies proposed."

The result is a centrally managed solution designed to offer the speed of a wired network and the adaptability of a wireless network with uncompromised security and a low total cost of ownership.

Local IT solutions provider Vizstone was engaged to devise a wireless deployment plan that covered new 802.11n network requirements and reuse of existing legacy wireless infrastructure. Ian Clark Solutions Architect at Vizstone said to accommodate these requirements, Vizstone deployed an Aruba 3,600 Mobility Controller along with a fleet of over 40 AP--105 dual radio access points to deliver 802.11n connectivity.

"Aruba's Airwave Management Platform was deployed to support the management of clients on both the new Aruba environment and their legacy Cisco wireless environment, as well as provide visibility across their switched network,"
Mr Clark said.
"The mobility controller provides a single enforcement point for all wireless traffic in the network, reducing the complexity of the deployment, which in turn simplifies troubleshooting and management."

THE BENEFITS
Since deploying its new Aruba wireless solution, the College now benefits from:
• Access points that can be deployed as needed with the network able to adjust automatically within minutes.

• Software upgradable design to support future applications –not a massive network rework.
• Identity-based security that follows users as they move across campus or across the world.
• Application-aware-optimised for converged data, voice and video support over wireless.
• Central management–easy to configure, monitor and troubleshoot with centralised control.

Mr Ta said he experienced an increase in productivity by having greater wireless coverage that is stable and highly available.

"Automated communication from the wireless system via email can now be set up for different criteria which is a significant benefit," he said.
"Thanks to Aruba, the College is now enjoying a fully autonomous wireless system and I found working with Vizstone for the deployment to be an asset in many ways, namely with their expertise, experience and enthusiasm in formulating a solution."
For further information on how Aruba's wireless solutions can help your school, please contact the team atVizstone.

**Vizstone is an IT solutions provider specialising in providing IT services and procurement to Western Australian corporate, educational, government and not-for-profit organisations.
As an Authorised Aruba Networks Partner, Vizstone has successfully deployed and supported WLAN solutions at local schools including Orana Catholic Primary School, Murdoch College, Tranby College and Chisholm Catholic College.**

PRODUCTS USED FOR THIS SOLUTIONS

• Aruba 3000 Series Mobility controllers (network now contains 3 controllers)
• Aruba AP-105 dual radio 2x2 MIMO 802.11abgn access points (90 APs deployed over the Campus)
• Aruba Instant IAP-105 dual radio 2x2 MIMO 802.11abgn access points (40 deployed over the campus)
• Aruba AP-135 dual radio 3x3 MIMO 802.11abgn access points (6 deployed in auditorium for high density)
• Aruba S2500-48P Mobility Access Switches (6 deployed in current network)
• Aruba ClearPass Policy Manager
• Aruba AirWave Management System
• Riverbed Cascade Shark Appliance
• Riverbed Cascade Pilot
• Palo Alto PA-500 Firewall Appliance