



Great Southern Grammar School Enables A Wireless Future With Ruckus Smart Wi-Fi

When Great Southern Grammar School (GSG) decided it was time to upgrade their Wireless LAN (WLAN) to 802.11n standard, they believed that the investment was as much about wirelessly enabling the future as it was about the present.

Located four-hundred kilometres south of Perth in Albany, Western Australia, GSG is a combined day and boarding school catering for approximately seven-hundred-and-fifteen K-12 students. Students have access to a mixture of Mac and Windows desktops and laptops, with three fully equipped computer labs also available.

One of the outcomes the school wanted to achieve was a speedy Wi-Fi network so reliable that wired access would become redundant for all of the school's laptop users. As for the future says Gavin Kennedy, GSG's IT Manager, "Everything is going mobile and we need to be prepared".



The school's pre-existing WLAN consisted of ten access-points (APs) with management and configuration through a wireless controller. "The management platform was pretty clunky and coverage was sketchy," recalls Kennedy. "We only had basic coverage in areas where the APs were installed and no coverage at all in corners of some rooms."

The limitations of the incumbent WLAN identified attributes the school was to demand from their new Wi-Fi network; performance, coverage and manageability, coupled with specific technical requirements of dual-band 802.11n and Power over Ethernet (PoE) capability.

Kennedy and his team researched the Wi-Fi market to identify three wireless technologies to trial at the school. Kennedy advises, "We read quite a lot about the product suite from Ruckus and their solution really stood out on paper. Their smart Wi-Fi technologies like the adaptive antenna array made the coverage and performance levels we wanted look possible."

With Ruckus added to a vendor shortlist that included Cisco and Xirrus, Kennedy arranged for a loan of Ruckus kit from ERA Communications, who had recently been awarded "Outstanding Ruckus Partner of The Year" by Ruckus distributor, Lan1.

Supplying the demo kit of three Ruckus ZoneFlex 7962 dual-band 802.11n APs and a ZoneDirector 1000 WLAN controller, Mark Filpo, General Manager of ERA Communications was on-hand to assist GSG with the trial. "The IT team at Great Southern Grammar are very skilled, and the elegant simplicity of Ruckus ZoneFlex meant we didn't need to get too involved in the demo at all. The product really does speak for itself," comments Filpo.

COMPANY OVERVIEW

Located in Lower Kalgan, near Albany, four-hundred kilometres south of Perth in Western Australia, Great Southern Grammar School is a combined day and boarding school providing quality education for approximately seven-hundred-and-fifteen K-12 students. Covering an area of one-hundred acres, the school campus houses multiple purpose built facilities providing students with modern and well appointed specialist learning spaces.

REQUIREMENTS

- Campus-wide high performance Wi-Fi
- Dual-band 802.11n
- Ubiquitous coverage
- Compatibility with mixed Windows/Mac environment of various model desktops and laptops
- Centralised management and ease of administration

SOLUTION

- Seventy-five Ruckus ZoneFlex 7962 dual-band 802.11n access points
- One ZoneDirector 3000 Smart Wireless LAN controller

BENEFITS

- Complete Wi-Fi coverage across the school which is consistent in performance and stability
- BeamFlex smart antenna system ensures interference avoidance and provides highest possible throughput levels
- Best-in-class solution for video streaming delivery with exceptional and flicker-free transmission
- Single point of management for multiple wireless networks increases efficiency and maximises security
- Auto-discovery of ZoneDirector allows APs to self configure and adjust for dynamic performance
- Ease of administration and robust Wi-Fi system keeps OPEX requirements low



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Gavin Kennedy

IT Manager
Great Southern
Grammar School

As Kennedy commenced a thorough product trial of the three competing wireless vendors, he immediately noticed an unexpected feature of the Ruckus product. "The first thing that stood out in the trial was how easy it was to set up a Ruckus WLAN. We just plugged in the APs and the controller did all the config," says Kennedy. During the trial, GSG streamed ClickView video to thirty laptops through a single AP, testing for latency, quality and speed of transmission.

What Kennedy found was flicker-free video streaming due to Ruckus' patented adaptive antenna technology, automatically routing signals to the best performing path and rejecting RF interference in real time.

"With every high bandwidth app we tested Ruckus was quick and stable and provided the best performance," advises Kennedy. "The high-gain dynamic antenna and spectrum analysis put Ruckus ahead. Together with the attractive price point Ruckus made for a compelling choice."

GSG now has seventy-five Ruckus APs deployed, providing complete wireless coverage across the one-hundred acre campus. Kennedy has been

pleased with the lack of hands-on time required to manage the system, which he describes as 'incredibly low maintenance'.

GSG has since set up multiple VLANs for tiered user access, including one for each of the school's three boarding houses. All VLANs are centrally managed through a single ZoneDirector control platform. According to Kennedy, configuring the VLANs for the boarding houses took a total of only thirty minutes, aided by Ruckus Technical Support acting as a sounding board for his blueprint.

GSG's vision of wirelessly enabling future technologies is being realised, with plans to implement an IP based phone system with wireless handsets within the year. "Now we can choose the technology we want knowing we already have the infrastructure in place to support it," states Kennedy.

"Our Ruckus Wi-Fi system has enabled us to be miles ahead in our technology. We don't need to spend time troubleshooting or managing the Wi-Fi. Instead, we get to focus on making improvements to the school," Kennedy concludes.

