02 Feb Ruckus Deployment Tackles Interference at Southfield Farm

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Location: Somerset, U.K.

Systems Installed: Ruckus T300

Integrator: Affinity Networks

Customer: Southfield Farm Caravan Park

Introduction

Southfield Farm Caravan Park in Somerset was looking to open an entirely new luxury pitch area named The Pavilion. Comprising of 48 luxury pitches, this section of the park was set to offer electric and piped gas, individually metered water and, most importantly, free WiFi.

Southfield Farm contacted Affinity Networks to design and deploy a wireless network that could deal with all the WiFi challenges that come with a holiday park.

The Challenge

As the Connected World continues to evolve, WiFi has become a staple provision, alongside water, gas and electricity, for those in the hospitality industry. Modern users expect reliable wireless connectivity—anywhere, anytime.

Providing enough bandwidth to cope with the high volume of traffic at Southfield Farm was imperative, as low bandwidth was often the cause of a poor WiFi experience.

Secondly, Affinity Networks needed to address the high level of RF interference the park experienced from not only their own guests, but the other nearby parks. 2.4GHz and 5GHz ranges in the area were over-saturated, resulting in high levels of interference. Add to that the constant RF noise and interference from the guests themselves, and the result was poor coverage, dropped connections and miniscule data rates.

The Solution

Affinity Networks sought out their trusted partner and distributor, Purdicom. The right product for the right solution was key, and Purdicom started by supplying 3 high end Ruckus T300 access points to begin tackling the immense interference issue.

The Ruckus T300 series of 802.11ac access points provide consistent, reliable WiFi in even the busiest of venues to extend range, improve throughput, and deliver industry-leading performance. The series also uses patented Ruckus technologies such as BeamFlex+ support to direct WiFi signal towards devices, and ChannelFly to find less congested WiFi channels with dynamic RF channel selection.

To further compensate for the busy channel frequencies, 200M of OS2 Loose Tube fibre was laid in 63mm ducting to deliver 1Gbps connectivity to the access points. The Ruckus APs are capable of delivering speeds of 860MB on 5Ghz and 300MB on 2.4, so high quality back-haul is important.

Lastly, Affinity Networks deployed a dedicated 100MB/100MB leased line. The line features a fully managed firewall with SNMP and NetFlow monitoring to ensure optimum performance of all available bandwidth.

The Outcome

In conclusion Affinity carried out:

- 200M of 4inch micro trenching with our KT216 trencher
- Buried 200M of 63mm flexible ducting and pulled OS2 Fiber
- Installed 3 high end Ruckus T300 access points
- Spliced and Terminated all Fibre to LC presentation

The park is almost ready to open to the public, after which it'll truly be put to the test. In the meantime, preliminary results have shown that the WiFi network is supplying a high level of throughput, with wider coverage, for a hopefully improved user experience.

UPCOMING EVENTS

Ruckus Networks RASZA Accredited Course

April 30 @ 9:00 am - May 1 @ 5:00 pm

Cambium Networks cnPilot Accredited Course & FREE E410 NFR KIT

May 21 @ 9:00 am - 5:00 pm

Ruckus Networks RASZA Accredited Course

June 4 @ 9:00 am - June 5 @ 5:00 pm

Cambium Networks cnPilot Accredited Course & FREE E410 NFR KIT

June 11 @ 9:00 am - 5:00 pm

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July 23 @ 9:00 am - 5:00 pm

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