

Wi-Fi Broadband Access at Cranfield Tech Park

Cranfield Technology Park required a wireless backbone to provide the high performance, availability, security, and flexibility needed to offer robust business broadband internet services to tenants of multi-occupancy property units.

Wireless communications specialist Briteyellow (www.briteyellow.com) a UK leader in designing, implementing, and managing metropolitan Wi-Fi broadband networks, has completed a high performance wireless backbone at Cranfield Technology Park. Tenants of multi-occupancy properties on the technology park campus are offered broadband internet speeds of up to 20 Mbps. The successful implementation of multi-radio wireless mesh nodes linked to a 100 Mbps ISP backbone provides managed broadband connectivity for each individual tenant up to 10 Mbps from an Ethernet socket.



Briteyellow has extensive experience of building high-performance wireless networks. The company is currently rolling out a metropolitan Free Access Wi-Fi network (*Britezone*) in Milton Keynes. “We have developed significant expertise in designing wireless mesh networks that scale” said Fredi Nonyelu, Briteyellow founder and Managing Director. “Integrating a mixture of multi-radio outdoor and indoor wireless mesh nodes with network infrastructure management systems enables us to deliver carrier-class wireless broadband in any environment”.

Before selecting a solution, St Modwens Plc, owners of Cranfield Technology Park established several critical criteria including performance, flexibility, reliability, security, and redundancy. The system was required to provide carrier class availability with minimum downtime. After extensive investigation Briteyellow was selected to fulfil all the criteria. According to Cranfield Technology Park Manager Val Kidd, “Briteyellow gave us exactly what we required. The system integrated seamlessly with our existing broadband billing system and allows us to manage access to all tenants from one interface. On top of the 128-bit Advanced Encryption Standard the Wi-Fi signal SSID is also invisible except to tenants we have provided with access keys. It offers our tenants the high data throughput they wanted. As a Landlord it gives us a simple interface for easy operational management”.

One key feature of the system is the use of a dual network server system that offers two linked Wi-Fi domains. This provides fault-tolerance and redundancy if any one network circuit fails. Also within each domain the multi-radio mesh architecture uses dynamic self-healing topology which means that in the event of any radio failure the user is automatically reconnected to an adjacent node so no downtime is experienced.



Case Study

Another important feature is the ability to manage and monitor the network remotely using advanced web management tools. “Complex, Wi-Fi systems in multi-occupancy properties cannot be managed effectively without the ability to remotely monitor and reconfigure the system on-the-fly” added Fredi Nonyelu. “Briteyellow has deployed advanced network management tools that enable the system to remain available even during system maintenance”.

The system also supports next-generation wireless Internet Telephony using standard phones linked to a wireless gateway and next-generation wireless and mobile internet phone handsets with built-in Wi-Fi chipsets for roaming.

Following the successful deployment, Briteyellow is exploring opportunities to expand its high-performance Wi-Fi network and wireless Internet phone coverage to other technology parks, campus, and multi-occupancy property environments, as well as town centres across the UK.



About Briteyellow

Briteyellow is a specialist wireless systems integrator. The company offers next generation wireless broadband, internet phone, and real-time location-based information services for government, enterprise and service providers across EMEA.

For more information visit www.briteyellow.com.