CASE STUDY

COMPANY NAME

Blue Coat School

The Birmingham Blue Coat School is a preparatory school in Birmingham England, founded in 1722. It supports children aged 2 to 11 divided into three sections - Buttons Nursery, Pre-Prep and Prep. The Blue Coat School owes its origin to Reverend William Higgs, Rector of St Philip's Church, Birmingham, now Birmingham Cathedral.

KEY CHALLENGES

- Provide a flexible, scalable WiFi solution able to support the critical learning functions and resources of the school's 650 students, plus staff, on a consistent, campus-wide basis

- Move away from single point of failure LAN controllers to a scalable, cloud managed solution

- Provide accurate, single pane of glass reporting for effective network management and maintenance

THE CHALLENGE

WiFi has been a foundational part of Blue Coat's academic programme for some time. Essential learning resources are shared through the school's online Portal, and an increasing number of students work from WiFi connected devices. The school therefore needs to ensure that the campus WiFi is always secure and reliable for both students and staff.

While the previous WiFi solution was able to provide sufficient signal strength, the school has in recent years been facing much greater challenges with the density of devices per area. Any new solution therefore needed to be able to provide consistent coverage through the thick walls of the school's clustered buildings, while also expanding the networks load handling capabilities.

Additionally, Frankie Paterson, Network Manager at the Blue Coat School noted that the old system was difficult to manage. "It was quite difficult to be able to quickly see how the AP's were performing, or how many devices were actually on the network" Paterson says. "Aerohive is able to provide this visibility with its simple to use dashboard view. For more granular information regarding either AP's or client devices it's easy to navigate the system."

Connectivity and reliability are paramount to the school with Paterson stating, "Due to how important the network is to the learning functions of the school, we can't afford any downtime during network maintenance, so we needed a solution which was managed in the cloud but was not dependent on the cloud."

Therefore, the main requirement was to have a system that would manage all the school's present network needs, while also providing flexibility to adapt and expand in the future. It was a difficult balance for the school's IT department Paterson observes: "We are seeing an average of 120 connected devices at any one time, with peaks of around 500, so we needed something that was able to handle this density, while also giving us flexibility to expand and adapt to changes in the future."

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>
> Frankie Paterson, Network Manager, Blue Coat School

ABOUT REDWAY NETWORKS

Redway Networks are specialists in networking and wireless solutions within the education sector. Our experienced team offer full site surveys, wireless network planning and installation as well as providing ongoing support with your wireless network.

Redway Networks have implemented education WiFi networks across a wide range of schools and colleges. Whether you are small primary school, large secondary school or multi-site academy trust, we can help find the right WiFi solution for your institution.

THE SOLUTION

After investigating several solutions, Blue Coat School felt that Aerohive was the right choice for their needs, due to the ease of maintenance, licensing and reliability.

Immediately the deployment was simplified when the Aerohive AP's were compatible with the existing mounts, meaning the historic architecture needn't be disturbed. The new Aerohive access points were able to provide the levels of coverage demanded by this challenging environment, while greatly increasing the capacity of each area to support many devices. Aerohive's unique distributed architecture has many benefits. One of which is the co-operative control between AP's enabling them to negotiate channel selection and power settings to ensure they provide greater resiliency and handover for connected client devices within the school.

Aerohive is an infinitely scalable solution, working well for the school's phased roll out. Due to being cloud managed it's simple to on-board new devices at any stage of the deployment and is not limited to the restrictions of a physical controller or 'cluster' size. Additionally, Aerohive's flexible licensing policy makes it easy for the school to build up its network even further in the future.

Since the initial deployment, Aerohive and Redway Networks have installed over 59 access points across the school. Due to budgetary restrictions, the rollout took place over the course of 6 months, meaning that it ran through term time. Despite this challenge, there was no downtime. Redway Networks were able to work closely with the school to ensure that disruption was minimised, taking full advantage of Aerohive's cloud management tools to ensure that critical learning functions were kept online.

FUTURE OUTLOOK

The Blue Coat School continues to make WiFi and e-learning resources a more common and integral part of the everyday functions of the school. The School has already ordered some additional Dell EMC 4064F and EMC 1548P switches and now is able to generate clear reports of network performance and challenges. Network downtime has been virtually eliminated due to this easy management, and the APs' ability to remain online. Finally, the school has been able to work closely with Redway Networks and Aerohive to ensure that their growth plan is fully supported and easy to execute. Reflecting on the new solution, Paterson says "The Aerohive solution is just unique full stop and offers a huge amount of flexibility. We have been thoroughly impressed and it has exceeded our expectations.

- 59 access points deployed across all buildings, ensuring consistent support and coverage for the school's 650 students.
- Enhanced reporting, and network reliability, eliminating downtime
- Greatly increased scalability and support for the school network

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Frankie Paterson, Network Manager, Blue Coat School