Cambium Networks™

cnPilot™ Connects 360 Students and Staff at St. John's Primary School

"Cambium Networks offered us what other alternatives couldn't: a cost-effective solution with phone-based technical support and a five-year warranty. Students and staff are pleased with the speed and reliability of the network."

NEIL TUNNICLIFFE, DEPUTY HEADTEACHER, ST. JOHN'S PRIMARY SCHOOL

The cnPilot e430 enterprise Indoor Wall Plate AP supports 802.11ac Wave 2 standards based beamforming.

The cnPilot e410 enterprise AP uses 2x2 MU-MIMO and packs a maximum transmit power of 25 dBm.

The Challenge

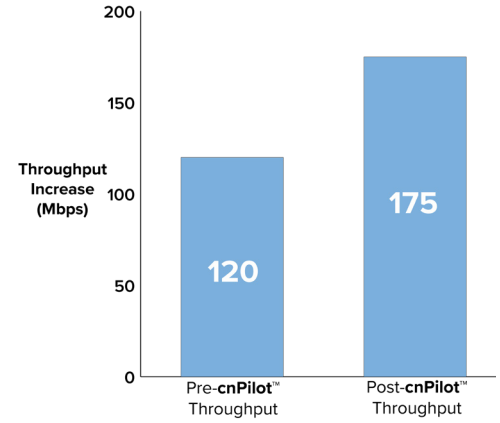
WIRELESS CONNECTIVITY IS AN INTEGRAL PART of today's learning experience for students, teachers and administration. St. John's Primary School, based in the United Kingdom, saw an opportunity to improve their connectivity once their previous solution was approaching its end of life. The school, which provides education for children aged 5 to 11, needed to support up to 30 children using laptops simultaneously, per classroom. A limited budget meant that mainstream enterprise providers were out of the question, and they were concerned about other options' one-year warranties and lack of manufacturer support.

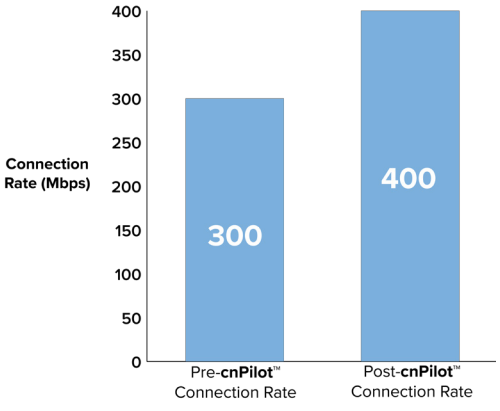
St. John's Primary School previously used a Wi-Fi solution that was patchy and had spots with little or no connectivity. With a single 802.11n client within immediate proximity of an access point (AP), there was a maximum connection rate of 300 Mbps and a maximum throughput of 120 Mbps, or about 40% efficiency. The school searched for a solution that offered 802.11ac and massive Multi-User MIMO (MU-MIMO) rather than legacy technology, 802.11n.

The Solution

ST. JOHN'S PRIMARY SCHOOL DEPLOYED a combination of twelve cnPilot™ e410 enterprise APs for ceiling-mounted locations and three cnPilot e430 APs for wall-mounted locations. All the APs are easily managed through cnMaestro™, Cambium Networks' end-to-end wireless network management solution.

Network planning was done in conjunction with the school's information and communications technology (ICT) provider, Agile ICT. The ICT provider pre-configured the APs, delivered the equipment to the installation team and used cnMaestro to remotely tune the installation. No training was required, and the school leveraged Cambium Networks' support for a couple queries which were quickly addressed and enabled them to move forward with installation.





BEST PRACTICES

"Ask lots of questions. A good provider will help you get the advice you need. By asking about the benefits and challenges of different approaches, we were able to choose the right solution for students and staff."

Neil Tunnicliffe, Deputy Headteacher, St. John's Primary School

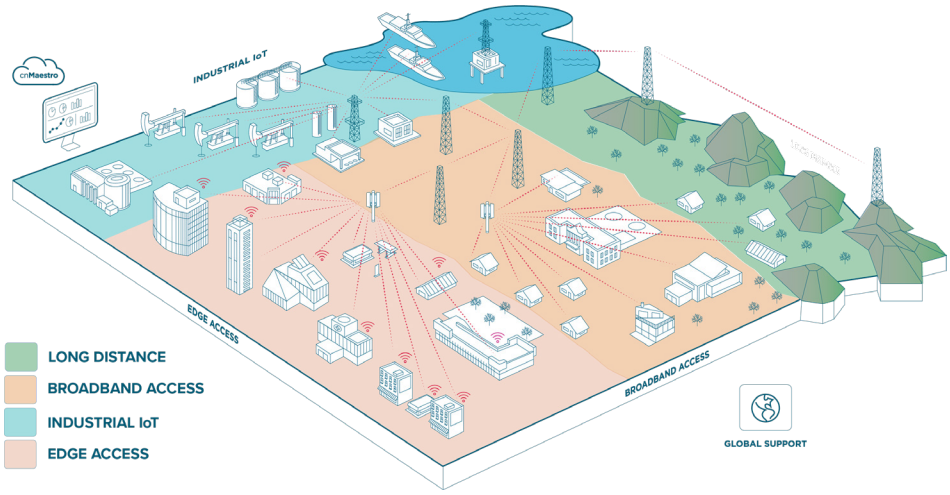
The Results

THERE ARE NEARLY 360 STUDENTS AND STAFF who connect to the school's network on a regular basis. The Cambium Networks-based Wi-Fi network supports iPad applications, Software-as-a-Service (SAAS) learning applications, SAAS applications that support the school's functions, general internet connectivity and their Windows domain. St. John's Primary school now has a reliable Wi-Fi network, giving the school a solid foundation for infrastructure.

Since the deployment of cnPilot, there is now a maximum connection rate of 400 Mbps and a maximum throughput of 175 Mbps, or about 44% efficiency. This is with a single 802.11ac client within immediate proximity of the AP. The Cambium Networks solution is a cost-effective solution which offers phone-based technical support and a five-year warranty. Speed from the existing 802.11n to the newer 802.11ac network has increased considerably, too. Satisfaction among students and staff is growing alongside the reliable, fast network.

Specific results include:

- 33% increase in maximum connection rate
- 46% increase in throughput
- 10% efficiency growth



Cambium Networks' Wireless Fabric of technology solutions enables network operators to tailor connectivity solutions to meet exact requirements and grow as needs evolve.

Next Steps

ST. JOHN'S PRIMARY SCHOOL PLANS to maintain the current solution and adopt new technologies, including cloud-based delivery models.