



Sector: Education

Solution: Cisco Meraki WiFi 6

Services: WiFi survey, design, configuration, support

Highlights:

- Selby College provides further and higher education provision to 5,500 students. With an open BYOD policy and on average 2,000 students on site accessing digital information hyper-reliable WiFi is essential.
- Its existing wireless was struggling to provide the bandwidth the College needed and it wanted a more superior WiFi 6 solution that could provide secure, robust wireless connectivity and high-density device management.
- Timescales were really tight so the College needed a provider who could deliver a bespoke wireless solution in its short timescales.
- Selby was impressed with Redway Networks' technical product knowledge, design capabilities and references in the education sector.
- Selby chose a Cisco Meraki WiFi 6 solution to meet its requirements for connectivity and performance and a future proofed network.
- Redway designed Selby's new WiFi 'off plan' using Ekahau's heat mapping software and delivered a seamless installation in less than a week.
- Selby College now has a hyper-secure Meraki network that provides the flexibility and control to keep the College connected with a seamless WiFi experience for its students.

Selby college

Selby College improves the student experience with high-density WiFi 6 - delivered in just 8 weeks - from Redway Networks.

Selby College has improved wireless connectivity and delivered the coverage and capacity required to support bring-your-own-device (BYOD) services for its high-density learning environment. The College's transition to next-generation Cisco Meraki WiFi 6 from Redway Networks has given the campus a hyper-secure, robust cloud-networking solution that delivers a seamless WiFi experience to students and staff.

Selby College, in North Yorkshire is a tertiary college that offers courses for A Level, degree, adult education and work-related business vocation. Thanks to a huge £35m investment in its state-of-the-art campus, the College now boasts some of the most up-to-date facilities of any education provider in the area. Selby College has an open BYOD policy which actively encourages and supports students using their own devices. It can see more than 1500 devices connecting to its wireless network and to support throughput and optimise services for these devices, particularly in high-density gathering areas, hyper-reliable wireless is vital.

Current WiFi cannot support density of users.

Mike Pilling, Network Services Manager at Selby College says: "During normal circumstances we have between 1,000 and 2,000 students on-site over several buildings all with smart phones, ipads and laptops accessing the College and guest WiFi. Times have moved on since we installed our existing Netgear solution, and it was struggling to provide the bandwidth we needed to support this number of devices and we felt the students were missing out".

Mike continues: "When we analysed our network, we found that 90% of its usage was actually for social and only 10% for the College side, so that really highlighted the need to improve our bandwidth. In this digital age, students choose a college not just for its courses but for the social side, so reliable WiFi is important to them. The College had received a government grant

to enhance its IT infrastructure so we took the opportunity to improve the wireless network with a more sophisticated solution that would support our high-density needs and future proof the network."

College goes out to tender

Once it had gone through its wireless requirements Selby College completed a specification document which was sent out to a purchase consortium to get advice on wireless technology vendors. Mike Says: "At the point of contacting the consortium, I received an email from Redway Networks (who has experience in the education sector) so I decided to add them to the list for review. Timescales were really tight due to our budget having to be spent by March 2021 so we not only needed a wireless provider who had the expertise to meet our requirements, but who could work around our short timescales and deliver a seamless project."

An ITT was then sent out and Redway Networks demonstrated the best technical ability, product knowledge and pricing in its bid. Mike says: "I didn't want to just go on price and was really impressed with Redway Networks. I felt confident that Redway had the technical knowledge and design capabilities to provide the best fit solution for us and we received a great service throughout the whole tender process".

Selby College selects Redway Networks

Redway Networks was then chosen to provide the new WiFi. Mike says: "I was looking for a cloud solution rather than an onsite wireless controller and when Redway showed me a demonstration of Meraki I really liked it and knew it would meet our requirements for connectivity and performance and I liked its easy-to-use dashboard. Plus, Meraki's 10-year software licence (plus the free year offer) was cheaper than the 5-year support deal offered by the other vendors."

Selby originally had 45 access points (APs) across the campus but wanted to increase that number both inside and outside to meet its high-density needs. So, Redway installed 72 Meraki APs with services that included WiFi survey, design, configuration, and support. Due to coronavirus Redway's engineer conducted the WiFi survey remotely to determine AP positioning, coverage and performance and the results were verified using Ekahau's visual heat mapping software.

Mike says: "Everything was done off plan. We literally went from building-to-building using video conferencing to discuss what the building was used for, size of the space, coverage requirements and wall material etc, so that Redway could design and create a bespoke network for our needs. When I got the heat maps back everything looked great, and it was signed off."

Seamless Meraki install in less than 8 weeks

From Selby College's initial request for information to the survey, design and installation was completed in less than eight weeks. Mike says: "I was over the moon with the service I received from Redway Networks and was delighted that not only did Redway install our new WiFi in less than a week, but the whole project was delivered sooner than our original planned date of the February 2021 half term – so our timescales were certainly met."

WiFi that supports a digital future

Selby College now has hyper-secure Meraki WiFi 6 solution with a centralised cloud-managed licence and automatic firmware upgrades for the next ten years. This provides the flexibility and control to keep the College connected and secure, whilst delivering a seamless wireless experience to its high-density student population.

Mike says: "Meraki hasn't been tested in full anger yet, but from what we've seen on-site we now have significantly better network coverage and must much faster WiFi. I am sure when the students come flooding back, they will be impressed with the bandwidth and speed at which they can access digital resources and stream media from anywhere on campus - even in large groups (which is something they couldn't do before) so we've improved the student experience."

Mike concludes: "I couldn't be more impressed with our new Meraki solution and I'm confident that even when we start seeing new educational technology and WiFi 7/ 8 capable devices coming onto our network, we'll have the wireless in place to build the digital College of the future."

If you would like to speak to Selby College for more details, please contact us and we'd be happy to arrange it.



Wireless Solutions. Made Simple.

Redway Networks is a leading WiFi specialist with experience in the planning, design and installation of enterprise-wide wireless networking solutions for education establishments.