



CASE STUDY: WEST LOTHIAN COUNCIL

West Lothian Council Invests in Wireless Refresh to Support the Delivery of a Modern Digital Learning Experience



Technology Needs

- Increased network capacity for growing number of devices and services used by students and faculty
- Improved wireless connectivity to ensure reliable connectivity in classrooms and enable teachers to maximize effective use of technology.
- Scalable, futureproof solution that will grow with the schools and their needs as education and technology continue to evolve and advance

Extreme Solution Components

- ExtremeCloud™ IQ
- Extreme Wireless

“With ExtremeCloud IQ, the digital learning team already has significant insight around the applications that the students are using, the bandwidth, and numbers or differences between our individual learning sites. The management information and insight can be used to evolve the digital learning process and perhaps introduce more standardised methods and practices across the West Lothian teaching estate.”

Matthew Clarke, IT Network Technical Team Lead, West Lothian Council

West Lothian Council (WLC) is the local authority for the West Lothian area in Scotland. Like all Scottish councils, WLC is responsible for the coordination and provision of essential public services such as education, social work, housing, highway maintenance, and much more. The local authority is responsible for almost 100 primary, secondary and ASN (additional support needs) schools, serving over 25,000 students.

West Lothian Council needed a new wireless deployment with enhanced performance and capacity for its evolving Wi-Fi and bandwidth-hungry environments and services. With the constantly changing nature of technology in academic settings, the new solution would need to be futureproof – scalable, flexible, and cost effective. The large number of schools within the authority included in the deployment would require a consolidated, centralised management solution to optimise operational efficiency and address any issues at-scale.

To formulate a plan for the new wireless deployment, West Lothian Council partnered with Maintel to conduct site survey work in their secondary and primary schools. It was concluded that each school would need an access point in every classroom, maintaining a 30:1 ratio of students to access points in order to avoid capacity issues and network downtime.



“I did a wireless survey at a school and the teachers could tell me the strength of the Wi-Fi signal in a given room based on where the students would sit. That was not where we wanted to be based with regards to equality of access and digital learning.”

Matthew Clarke, IT Network Technical Team Lead, West Lothian Council

Results



High-performance connectivity

- Increased network capacity and enhanced performance guarantees connectivity for students and faculty regardless of location or number of devices online



Equal Access and Enhanced Digital Learning

- Created, effectively, a completely online learning environment with 30 to 1 student to AP ratio
- Stable infrastructure to support the on-going use of technology for effective learning



Simplified Network Management

- Consolidated network management into a single pane of glass view solution simplifies maintenance and oversight of entire school district
- Optimized operation efficiency and foresight into network health relieves burden on IT department and frees up time to focus on critical tasks and projects



“If we weren’t doing the work that we’re doing with the Maintel-Extreme education Wi-Fi refresh, we would have an awful lot of additional cost that we would need to invest to even be able to support the notion of providing each student with a dedicated device.”

Ian Forrest, IT Service Manager, West Lothian Council