SEVERN TECHNOLOGIES

TAUNTON SCHOOL

SMART, SECURE & SCALABLE WI-FI AND SECURITY

DELIVERING NEXT-GENERATION WI-FI AND SECURITY AT TAUNTON SCHOOL

OVERVIEW

Taunton School, a prestigious independent school known for combining academic excellence with modern digital learning, was facing mounting challenges with its aging Wi-Fi infrastructure. With hundreds of pupils, staff, and visitors depending on reliable, secure connectivity, the existing system started to struggle to meet the these growing demands. Severn Technologies partnered with Taunton School to design and implement a high-performance wireless and security solution built on HPE Aruba technology. The project provided a future-ready, fully integrated platform capable of supporting advanced learning tools while protecting the school from evolving cybersecurity threats.

CHALLENGE

The school's existing Wi-Fi network was soon to be end of life and the needs of the school had evolved.
The school had gone to market to evaluate the latest technologies that best suited the growing demands of a digitally connected campus and would alleviate the following pain points:

- Inconsistent coverage across classrooms, boarding houses, and communal areas
- Sporadic connectivity dropouts disrupting teaching and learning
- Multiple SSID's impacting performance and security
- No centralised control over device access or security policies
- Limited integration, leaving gaps in overall network security
- Rapid device growth, with hundreds of personal and school-owned devices requiring secure onboarding

SPECIFIC ISSUES

- **Systems and Equipment**

  A near end-of-life Wi-Fi system that strained to keeping up with current and any future demands while providing limited redundancy.

- **Network Security and Device Access**

  With hundreds of personal and school-owned devices connecting daily, the old system lacked cohesive access control and segmentation. Meaning multiple systems and tools had to be utilised making troubleshooting time consuming

- **Security Management**

  Managing security policies, user access, and device compliance required juggling multiple tools with no single point of control. This fragmented approach made it harder to detect vulnerabilities and respond quickly to threats.

A modern, secure and scalable solution was required — one that would not only improve wireless performance but also unify security management across the school's entire digital infrastructure.

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THE SOLUTION

Severn Technologies carried out a comprehensive network audit to identify performance issues, coverage gaps, and security vulnerabilities. Leveraging HPE Aruba's advanced wireless platform alongside Aruba ClearPass, Severn Technologies delivered a secure, high-performing Wi-Fi solution tailored to the school's needs.

Eduroam was also setup and integrated, giving staff and students the ability to roam not only across the campus but any eduroam establishment globally while minimising SSID's and complexity at a network level.

Crucially, the solution was integrated with third-party Mobile Device Management (MDM) solutions and other security platforms to create a single point of control for managing devices, users, and access policies across the network. This unified approach ensures every potential attack surface is monitored and protected.

Key Solution Components

- Deployment of HPE Aruba access points for seamless, high-speed campus-wide coverage
- Aruba ClearPass to provide secure, role-based authentication and network segmentation
- eduroam setup and configuration
- Integration with third-party MDM solutions to manage mobile devices securely and enforce compliance policies
- Linking with firewall platforms to strengthen perimeter security and monitor external threats
- Unified visibility and policy enforcement across all platforms, giving the IT team full control from a single management interface

KEY IMPROVEMENTS

- **Reliable Campus-Wide Coverage**

Aruba's next-generation access points now deliver high-speed, consistent Wi-Fi across classrooms, boarding houses, sports facilities, and outdoor spaces, eliminating dead zones and improving connectivity for all users.

- **Advanced Security with Aruba ClearPass**

Role-based access control ensures pupils, staff, and visitors connect securely, while automatically segmenting sensitive systems to protect against internal and external threats.

- **Integration with Third-Party Platforms**

By linking the Aruba environment with existing MDM solutions, the school can now centrally manage thousands of personal and school-owned devices, ensuring they remain compliant with security policies before granting access to the network.

- **Strengthened Protection with Firewall Integration**

Next-generation firewalls work seamlessly with Aruba's security framework to block malicious traffic, detect anomalies, and provide deep inspection, safeguarding against both known and emerging threats.

- **A Single Point of Security Management**

The integration between Aruba ClearPass, third-party MDM, and firewall platforms has created a unified security dashboard. The IT team now manages all access policies, devices, and threat controls from one place, simplifying operations and reducing potential vulnerabilities.

THE IMPACT

The transformation has had a significant positive impact across the school community:

- For pupils: Consistent, fast, and secure connectivity enables enhanced learning and collaboration.
- For staff: Seamless access to teaching tools and administrative platforms boosts productivity.
- For IT: Centralised network visibility and security management reduces complexity, improves visibility, and strengthens overall cyber resilience.

CONCLUSION

Through its partnership with Severn Technologies, Taunton School has deployed a state-of-the-art wireless and security solution built on HPE Aruba, laying the foundation for scalable growth and future needs.

By integrating Aruba ClearPass with third-party MDM platforms, next-generation firewalls, and other security tools, the school now benefits from a single point of control to manage network access, secure endpoints, and protect against threats across all possible attack surfaces.

Learn more about
Secure Networking in Education

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