

THE DIGITAL REVOLUTIONARIES

UKI Education

Showcasing How the Most Transformative
Companies are Leading the Digital Movement



ON THE COVER: CROFTON SCHOOL

Crofton School is a coeducational secondary school, located in Stubbington, Hampshire, England and has around 1,100 students aged between 11-16. The school recognised it needed robust coverage across the entire site, indoor and outdoor, to enable seamless roaming.



THE
DIGITAL
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FOREWORD

In this digital age, innovation is fuelled by creativity and the only limit is our imagination. At Aruba, we imagine a world where technology goes far beyond the role of aiding the things we do, to revolutionising the way we connect and how we experience this mobile-first world. We are on a mission to empower the next generation by creating intelligent classrooms that will transform the way that students learn.

This book contains stories of institutions that are creating mobile learning experiences, by bridging the gap between physical and digital. Together, we are putting student experience at the centre of everything we do, and redefining learning outcomes by empowering and safeguarding students through technology, as well as engaging with them like never before. We hope these stories will capture your imagination and inspire your innovation.



Tim Aldridge
Sales Manager, Aruba UK





PRIMARY EDUCATION



Aruba lays platform for educational excellence at leading UK independent school

CUSTOMER PROFILE

Bryanston is one of the UK's leading independent schools, home to 680 students and 180 teaching staff. Pupils are encouraged to experience a wide range of academic subjects and extra-curricular activities; each pupil benefits from one-to-one tutoring throughout their time at Bryanston.



UNITED
KINGDOM



PRIMARY
EDUCATION

USE CASE

Bryanston needed a strong wireless network that could scale so that pupils could access materials and teaching resources and collaborate wherever they are on the school's campus. The network makes for a more engaging teaching environment, more consistent pupil assessment and improved care for boarders.

REQUIREMENTS

- Apply technology to improve individual learning experience
- Create platform supporting long-term innovation, e.g. digital exams
- Build a network to accommodate critical academic and pastoral applications
- Structured, secure network access policies and tracking of usage
- Simplified management and accommodation of spikes in network demand

SOLUTIONS

802.11ac Indoor & Outdoor APs; 7000 Series Mobility Controllers; Aruba campus access switches; Aruba ClearPass for access control; Aruba Beacons; Aruba AirWave Network Management

OUTCOMES

- Comprehensive network coverage across entire campus
- Load balancing to soften spikes in demand
- Secure pupil access based upon appropriate privileges
- Supports three critical Bryanston applications
- Elevates learning and pastoral experience for pupils

"Bryanston is famous for welcoming pupils who are varied in their talents and interests. We regard it as very important that pupils learn, grow, develop and work hard at things they enjoy."

SARAH THOMAS
HEAD

Bryanston School



② Project

③ Calculus

Turn in Homework on Monday

subject test

math start time

12:20

Everybody is
genius. BUT
you judge a
person by its ability
to climb
up, or walk, or use its
life believing
that it is stupid.
ALBERT EINSTEIN





SECONDARY EDUCATION



Aruba Central enables UK comprehensive school to manage BYOD access for pupils and staff, and enable seamless roaming

CUSTOMER PROFILE

Crofton School is a coeducational secondary school, located in Stubbington, Hampshire, England. The school has around 1,100 students aged between 11-16 and has been rated 'Good' by the UK government's industry watchdog.



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SECONDARY
EDUCATION

USE CASE

Increasingly, teachers at Crofton are moving between classrooms. They store lesson plans in the cloud. They're working at home, or they're working in groups away from the classroom. The school recognised it needed robust coverage across the entire site, indoor and outdoor.

REQUIREMENTS

- Ensure wireless coverage across the school campus, indoor and outdoor
- Deliver high-performance connectivity, capable of supporting heavy media content
- Simplify guest access, while retaining tight control

SOLUTIONS

Aruba Central & Clarity; Aruba 802.11ac Wave 2 indoor and outdoor instant access points; Aruba 2930F Series Campus Edge switches; Aruba 5412R Campus Core switches; Managed Network Service via Aruba Central by accredited partners Medhurst Communications

OUTCOMES

- Supports BYOD for students and staff, and enables teachers to roam between classrooms
- Simplifies network management, with singular view of access and performance, easy-to-scale bandwidth, and granular reporting
- Provides flexibility around physical space, allowing classrooms to be converted into IT suites
- Allows the school to roll-out Office 365, and explore further cloud-based applications



SECONDARY EDUCATION

“We have five buildings, large playing fields and a rolling programme of building refurbishment. We needed wireless connectivity across the school, but with the flexibility to adapt and grow as the school requires.”

JULIE BOWDEN
NETWORK MANAGER
Crofton School

Aruba wireless platform inspires Godolphin School's approach to learning

CUSTOMER PROFILE

Godolphin School is an independent girls' school in England. The school, which dates back to 1726, teaches 480 girls from the ages of 3 to 18, half of them as boarders. Heritage aside, Godolphin aims to create a thoroughly modern teaching environment.



UNITED
KINGDOM



SECONDARY
EDUCATION

USE CASE

Godolphin School wanted to create an environment where girls can develop as individuals and where doors are open for them. IT has to support that ideology and support the growth in video content, and provide broad network coverage to serve the school, playing fields and dormitories.

REQUIREMENTS

- Foster innovative new mobile learning behaviours, underpinned by consistent connectivity across the school
- Support high-density of concurrent devices
- Simplify IT management to reduce strain on resources, with single view of network
- Minimise any disruption to students and staff with an end-to-end solution, clear innovation roadmap and simplified implementation

SOLUTIONS

Aruba Core and Access Switches; High-density 802.11 ac indoor and outdoor APs, Mobility Controller, ClearPass Policy Manager, ClearPass Onboard and Guest modules

OUTCOMES

- Seamless wireless connectivity across the school campus, both indoor and outdoor
- Robust guest portal, along with secure ID- and device-based access, supporting BYOD agenda
- Centralised management including network traffic analytics
- Underpins e-learning strategy, connecting 30+ tablets per class and supporting Microsoft® Office 365, Firefly and Planet eStream platforms
- Enables development of online teaching resources and administration
- Provides a platform innovation, enabling the testing of new applications and features

SECONDARY EDUCATION

"The IT environment has changed enormously over the past four years. Our technology should be ubiquitous; it's there, it works, but you don't need to see it. We have that with Aruba. The perception – from parents, students and staff, is of a school where technology enhances the learning experience."

NIGEL EVERETT
DEPUTY HEAD COMMUNICATION
AND INNOVATION

Godolphin School



Aruba switches future-proof network for one of the UK's oldest independent schools

CUSTOMER PROFILE

Rugby School is one of the oldest independent schools in the UK, founded in 1567. But Rugby is far from medieval. It is one of the country's most modern, and most connected schools. The site is ringed by 15km of OM1 fibre.



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SECONDARY
EDUCATION

USE CASE

Students and teachers expect content-rich classroom environments, with the means to stream, share and interact with content. Likewise, students want to be able to pick up their studies later in the evening off a laptop; teachers will post reports and give feedback online, on cloud-based platforms.

REQUIREMENTS

- Ensure the bandwidth and resilience to accommodate network growth
- Future-proof network, with means to add new capacity as required
- Reduce strain on inhouse IT, with simpler management and single view of operations

SOLUTIONS

Aruba OS-CX switching environment; Aruba 8400 Switch Series; Aruba 2930F Switch Series; Aruba AirWave Network Management

OUTCOMES

- Supports modern teaching methods, cloud-based applications and content-rich classroom environment, with easy-to-scale bandwidth
- Frees resources for IT service innovation, with greater automation and simpler network configuration
- Creates value-add for the school, with guarantee of high-performance network



SECONDARY EDUCATION

“VLANing was a pain point, very hard to do on the old switches. With the Aruba architecture and tools, we’re saving 50-70% on manpower, configuring and automating VLANs.”

ANDREW WAPLES
IT DIRECTOR

Rugby School



Aruba central to success of mobile-first strategy at pioneering UK school

CUSTOMER PROFILE

Stanley Park High is a successful mixed 11-19 school which is truly comprehensive by nature. The campus has capacity for 1,300 children across two three-storey blocks and its goal is to help young people ignite a passion for learning.



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SECONDARY
EDUCATION

USE CASE

Students are now free to roam around the buildings, even during study periods. There is no drop in connectivity, and there is consistent enough bandwidth to view large media files. The plan is to extend wireless coverage throughout the campus, including the outdoor areas, sports facilities and horticulture buildings.

REQUIREMENTS

- Provide a real-time collaborative and learning experience
- Make it easy-to-share and to access work anywhere
- Ensure 24x7 availability of services
- Allow the school to shift from fixed to wireless as primary connectivity method
- Future-proof network, with means to add new capacity as required

SOLUTIONS

Aruba Central cloud-based network management; 802.11ac Wave 2 Aruba indoor and outdoor instant access points; Aruba 2930F Campus Edge switches; ArubaOS 8

OUTCOMES

- Seamless, high-performance roaming across the school
- Supports modern teaching methods, including cloud-based Mobile Learning Environment and full mobility for students
- Simplifies network management with singular view of access and performance, easy-to-scale bandwidth and granular reporting
- Maximises physical space, opening up the entire campus and enabling flexible use of classroom
- Supports continued innovation around location services, IoT and smart building management

SECONDARY EDUCATION

"Wireless will eventually be the primary means of connection across the school. We have capacity for 2,000 devices to log on concurrently, with seamless roaming."

MICHAEL SULLIVAN
IT MANAGER

Stanley Park High



Fostering dynamic learning experiences at world's oldest school

CUSTOMER PROFILE

The King's School is an independent, day and boarding school in Canterbury, England. It is held to be the oldest continuously operating school in the world, having been founded in 597AD. Digital transformation, mobility, and IoT are major themes.



UNITED
KINGDOM



SECONDARY
EDUCATION

USE CASE

The Aruba architecture provides the platform on which King's can deliver a dynamic teaching environment. Classrooms have smartboards and touchscreens, teachers work from iPads and all students now have access to a Virtual Learning Environment (VLE). The network creates capacity for three devices per student.

REQUIREMENTS

- Ensure consistent network access for three groups of users: students, staff and visitors
- Support the digital transformation of the classroom, simplifying connectivity for Apps and devices
- Demonstrate and deliver a secure communication platform for pupils, to parents
- Simplify network management in the face of increasing demands on IT resources

SOLUTIONS

Aruba 802.11ac access points; Aruba 7210 Mobility Controllers; Aruba Campus Core Switches; Aruba Campus Edge Switches; Aruba ClearPass Policy Manager – BYOD, Guest, NAC; Aruba AirWave Network Management; Aruba Meridian location services for the King's App; Aruba BLE Beacons; Integration with Palo Alto Firewall; Integration with LobbyConnect Guest Registration

OUTCOMES

- Establishes high-performance wireless coverage throughout a challenging built environment
- Secures role-based access and consistent experience for students, staff, visitors, and IoT devices
- Paves the way for more modern, engaging teaching technologies and experiences
- Delivers first-rate network experience, demonstrating value for money for fee-paying parents
- Ensures the scale to expand network usage, whether onboarding new users, new locations or expanding IoT

SECONDARY EDUCATION

"Aruba ClearPass, in my opinion as a network manager, is invaluable. We can seamlessly segment different user groups via role-based policies, and we have a real-time understanding of who or what is coming onto the network."

SIMON REYNOLDS
NETWORK MANAGER

The King's School





HIGHER EDUCATION



Aruba delivers robust platform for educational excellence at Ayrshire College

CUSTOMER PROFILE

Ayrshire College aims to serve the people, communities and employers in Ayrshire. The college plays a key role in helping to develop the local economy by ensuring that students develop the right skills and positive attitudes to support workforce needs.



UNITED
KINGDOM



HIGHER
EDUCATION

USE CASE

Ayrshire College wants to have the traditional 'chalk-and-talk' environments but have the ability to turn them into 'smart classrooms' when required. It also wants students to be able to study away from the classroom, wherever they are across the campus. That means it needs a very stable, very secure, high performance wireless network throughout.

REQUIREMENTS

- Smart, collaborative environment for modern teaching
- Bring down structural, location-based barriers to learning
- Supply and control the end-point learning devices
- Provide a platform for innovation across multiple sites
- Be seen as a sector leader

SOLUTIONS

802.11ac Wave 2 Aruba APs; Aruba Campus Switches; Aruba ClearPass Policy Manager; Aruba AirWave Network Management; HPE Moonshot Server; HPE 3PAR Storage; Citrix® Virtual Desktop solution

OUTCOMES

- Data protection and security
- Seamless wireless connectivity across the school campus, both indoors and outdoors
- Single-pane visibility and efficient management for the wired and wireless network
- Centralised access control for guests, students, staff and eduroam users
- Half the time to diagnose and resolve issues



HIGHER EDUCATION

“We want the traditional ‘chalk-and-talk’ environments but have the ability to turn them into ‘smart classrooms’ when required. We also want students to be able to study away from the classroom, wherever they are across the campus. Aruba ensures we have a very stable, very secure, high performance wireless network.”

BRAD JOHNSTONE
HEAD OF ICT

Ayrshire College

Aruba Wi-Fi + AirWave create city-wide network access at one of the world's leading universities

CUSTOMER PROFILE

The University of Cambridge is one of the world's oldest academic institutions. The unique structure of Cambridge, 31 colleges and more than 150 departments, poses unique challenges. Founded in 1209, the modern Cambridge has 18,000 students.



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HIGHER
EDUCATION

USE CASE

The university wanted to create an effective wireless network which covers the entire city of Cambridge. This seamless experience allows Cambridge students and staff as well as visiting students, researchers and academics to connect and collaborate. Last year 30,000 visitors successfully accessed the Aruba wireless network.

REQUIREMENTS

- Establish city-wide, high-density wireless
- Ensure singular management view of 7,000 access points
- Simple and scalable guest access
- Platform on which to develop new IoT and wireless applications

SOLUTIONS

802.11ac Indoor & Outdoor APs; Mobility Controllers; Aruba Remote Access Points; Aruba AirWave for network management

OUTCOMES

- Creates overarching wireless strategy for entire city
- Provides singular view of entire access point estate, simplifying management
- Enables the delivery of value services to many university departments, colleges and partners
- Ensures seamless uninterrupted connectivity and mobility around the city



HIGHER EDUCATION

"The Aruba solution has proved to be easy, reliable and intuitive. With our manpower resources, we would not have been able to achieve what we've achieved without a solution like Aruba."

JON HOLGATE
HEAD OF NETWORK UNIVERSITY
INFORMATION SYSTEMS

The University of Cambridge

Improved network monitoring and access control enhances the mobile experience at the University of Essex

CUSTOMER PROFILE

The University of Essex was established in 1963 and is currently home to 10,700 undergraduates across three campuses in Colchester. It is in the Top 15 for the sixth year running for overall satisfaction in the National Student Survey.



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KINGDOM



HIGHER
EDUCATION

USE CASE

Like others within the competitive UK university sector, the University of Essex is keenly aware of its performance in ranking tables. Student experience is a major consideration. To support a massive increase in the use of mobile devices, the University needed to overhaul its wireless network and provide a platform for future growth.

REQUIREMENTS

- Replace ageing wireless infrastructure
- Upgrade the wireless experience to cope with dramatic increase in users and devices
- Create a platform on which to add new wireless functionality

SOLUTIONS

500 Aruba AP-105 and AP-135 access points with six 7000-series mobility controllers; AirWave Network Management; ClearPass Policy Manager and ClearPass Guest

OUTCOMES

- Improves wireless performance for users, with strengthened network resilience
- Simplifies management of wireless estate, with old access points transferred to new controllers before rolling upgrades
- Creates single view of wireless users and usage, enabling the University to better plan coverage
- Enables the University to upgrade functionality as new technology becomes available

A photograph of the University of Essex campus. In the foreground, a large, curved glass reflecting wall stands on a green roof. The wall reflects the surrounding buildings and the sky. In the background, several modern, multi-story buildings with glass facades are visible under a clear blue sky. A pedestrian bridge connects different parts of the campus, and a green lawn is in the immediate foreground.

HIGHER EDUCATION

"We have a huge number of students with smartphones or tablets. It went from one wireless device between three or four people to three devices per person. Now everyone uses it – students, staff, visitors and so on – and they expect coverage in every corner."

ANDREW LARKIN
NETWORK MANAGER
The University of Essex

AT ARUBA, OUR CORE PHILOSOPHY IS **CUSTOMER FIRST, CUSTOMER LAST.**

This belief system is about putting our customers at the heart of our existence, where everything we do starts and ends with our customers. We innovate so that our customers can innovate.

Our vision is to revolutionise the way we all connect and experience the mobile-first world. Our mission is to deliver the building blocks for that innovation with a software-defined network architecture that doesn't just securely connect everyone and everything, but also serves as a platform for businesses to unlock new levels of intelligence, agility, freedom, and creativity - thereby arming them with the foundation for a mobile and digital future.