

Case Study



Kingsbridge Community College



Customer	Kingsbridge Community College
Installation Partner	RivaNET Limited
Location	Kingsbridge, Devon
Requirement	Provide an available, reliable and secure wireless solution
Equipment	Aruba 2400 WLAN Switch, 27 Aruba 61 802.11a/b/g Access Points and Aruba OS 3.1 Secure Mobility Software.
Customer's View	<i>RivaNET and Aruba have delivered a highly secure system for laptop usage within the college. The user experience has improved dramatically and as a result the demand for wireless access has grown considerably. We are extremely happy with the Aruba solution.</i> <i>David Membry – Kingsbridge College</i>

Kingsbridge Community College is a non selective comprehensive school of over thirteen hundred students. It received an Outstanding Ofsted rating with no recommendations for improvement and has Specialist Schools Trust status in Science and Maths, Arts and English. The College is located in rural Devon on a site in the town of Kingsbridge with five major buildings and a number of smaller ones.

Key Requirements

- Allow classes to use IT flexibly where and when dictated by the flow of work instead of when the IT suite is available.
- Establish a secure wireless environment preventing rogue access points or unauthorised laptops from being added.
- Permit an increase in the number of notebooks in a classroom when required.
- Provide access only to approved users without exposing the network to security hazards and without having to touch client machines.
- Encourage development of the use of wireless equipment through flexibility of system control and design.



The use of computers in the College has changed over the last few years as has the delivery of teaching aims. Only five years ago the model was driven by the affordable technology.

Teaching had to be planned around the availability of computers. Classes were moved to the equipment. Delivering the IT element of the curriculum was just in specialist lessons and therefore often not consistent with the teaching aims. The desire had always been to use IT as a tool, integrated within each lesson, available in the classroom as needed.

Trials of notebook computers had taken place. Rather short battery life, fragility, poor wireless stability, lack of security and cost of support of the laptops had made them impractical. In 2004 laptops became available with special batteries which would last a teaching day. They were also lighter and reasonably robust and more affordable.

A trolley of 15 notebooks and some standard wireless access points were purchased and a trial started. Fifteen were chosen to give at least one computer between every two students in a class. A high technician input was required and there was a continual loss of wireless connectivity. The pressure for additional sets of notebooks was high even with these severe shortcomings. A further two sets of 15 were purchased less than a year later.

Benefits

- Increased use and availability of notebooks.
- Improved user experience.
- Increased control and monitoring.
- Ease of deployment and future development.

In spite of the installation of large numbers of standard access points the user experience was still poor and technician support was required for most lessons. The trial demonstrated that availability of computers within a standard classroom was attractive and notebooks were ideal as they could be easily put away if not needed. The trial also made it clear that the original wireless solution was not scalable. The college needed to increase the number of sets of notebooks even further and deploy them within a small area, so a solution had to be found. Considerable research and review of reports of trials showed that the Aruba network system was the best solution.



RivaNET was chosen to implement the system due to the fact that they had already advised, designed and supported the expansion of the College network. They were familiar with the restrictions and requirements for working in schools and they had considerable experience of working with the Aruba system as an Aruba Silver Partner. Kingsbridge College had confidence in their range of skills, flexibility and ongoing support, which they realised, would be necessary for a successful implementation and the planned future development.

RivaNET installed an Aruba 2400 WLAN switch at the core of the installation. This allowed the college to deploy several different wireless networks with different security and access over a single system. These were closely integrated with the wired network and give the notebook users the same experience and files as using the wired system.

Another key requirement was to provide a secure system for users of personal wireless laptops giving them access to a filtered Internet feed. These users can access their College files over the Internet without exposing the network to viruses or other security problems and complete Internet research in a "safe" environment.



The efficiency and ease of control of the intelligent access points meant that fewer were required than had been used before, in spite of increasing the coverage over the five main buildings and several minor ones.

The ease of setup meant that the College technicians could install the preconfigured units in the planned locations. Additional units have since been added as the improved user experience has led to demand for coverage in areas not initially planned. RivaNET remotely configured these units and the College technicians were able to install them without any problems. The usage of the sets of notebooks (now 5) is very much higher per unit than before as the user experience is so much better.

Technicians are now surprised if there is a wireless problem and the monitoring and logging gives a clear view of the increased usage and by whom and where. The centralised control has allowed changes to the network to be easily made as ideas have developed. Previously these would have required major downtime with the original wireless equipment and would have been held over until the school holidays.

The move to an Aruba network has meant that the IT vision has become a reality.
David Membry *Network Manager*



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