

CASE STUDY

OYSTER RIVER GETS BYOD — AND MORE — IN AN INSTANT



When the offspring of collegiate professors are predominant in your district, it creates a unique educational environment. “We serve the area surrounding University of New Hampshire,” explains Josh Olstad, Information Technology Director for the Oyster River Cooperative School District. “That has helped us be very forward-thinking.”

But, the district’s networking infrastructure was unable to keep pace. “Students were bringing multiple devices to school,” says Olstad of the 2000-pupil district. “Although we wanted to give BYOD devices access, our existing network was unable to support them.”

Even normal classroom demands frequently overwhelmed the district’s infrastructure. “I had to plan 20 extra minutes to get computers logged onto the network,” recalls Mark Lawrence, who teaches high school science. “Even that wasn’t always enough.”

Not only were frustrations mounting among educators, but the district was also transitioning to the New Hampshire College- and Career-Ready Standards, a version of the Common Core State Standards. This meant Oyster River required the technology infrastructure appropriate to help meet new teaching and learning goals. “It was important to invest in the right infrastructure,” says Olstad.

BENEFITS

- Enables BYOD and school-owned device access for teachers, staff, students and guests.
- Leverages Aruba Instant™ APs for fast, zero-touch, self-provisioning configuration of access points.
- Unifies wired and wireless networks with Aruba’s Mobile Virtual Enterprise (MOVE) architecture.
- Includes Aruba ClearPass Access Management System™ for centralized, comprehensive policy enforcement with ClearPass Policy Manager and ClearPass Guest.
- Utilizes Aruba AirWave™ Network Management for optimizing the wireless network to deliver exceptional user experiences regardless of device type.



“Aruba’s unified wired and wireless network, along with robust management tools, enables our teachers to deliver 21st Century learning experiences for college and career readiness.”

Josh Olstad

Information Technology Director for the Oyster River Cooperative School District

Among Oyster River's technology needs was streamlined network management. "Historically, everything we did was fairly manual. We'd configure switches port-by-port. Everything was very static, didn't allow for change and was time-consuming for our limited IT staff."

To modernize, the district decided to replace wired networking switches as well as wireless infrastructure. It considered solutions from multiple leading manufacturers.

MAKING THE MOVE TO INSTANT

Ultimately, the district chose Aruba Networks®, installing a unified wired and wireless access network based on Aruba's Mobile Virtual Enterprise (MOVE) architecture. "Although we didn't expect to purchase Aruba switches, they proved to have very similar functionality to our existing vendor's," Olstad says. "In fact, Aruba's products had the highest functionalities at affordable price points."

To deploy, Oyster River chose a window between the end of summer school and the beginning of classes in the fall. The rip-and-replace effort went smoothly and was completed in just less than three weeks.

In addition to switches, critical components of the new infrastructure included Aruba Instant Access Points (APs) and the Aruba ClearPass Access Management System.

With Aruba Instant APs districts like Oyster River can significantly reduce deployment, maintenance and build-out efforts. The technology provides zero-touch, self-provisioning capabilities enabling a single "master" AP to communicate configurations to all other similar APs on the network.

Further, if an AP needs to be replaced, or additional APs are required to meet new demands, it's a snap. Anyone, including field staff, can simply plug in a new Instant AP and the master sends it the appropriate configuration information.

No matter what the scale, zero-touch APs provide districts with considerable resource savings, enabling IT staffs to focus on more mission-critical tasks.

PUTTING POLICIES ON A CLEARPASS

In terms of management, Olstad says the rewards from deploying ClearPass are abundant. "We adopted ClearPass Policy Manager and ClearPass Guest," he says. "With ClearPass we no longer spend all that time going port-by-port for configuration."



Indeed, ClearPass provides AAA (Authentication, Authorization, and Accounting) services, assisting Oyster River with comprehensively managing network policies, onboarding and managing devices securely and admitting guest users, all from a single platform.

"It just made sense to dynamically push out policies to switch ports and users," says Olstad. "Plus it gives us significantly more flexibility for policies based on devices and privileges. With all the policy flexibility, security is much easier to manage.

"For example," he continues, "when students use a school-owned device we provide access to the Internet, specific servers, printers, etc. When a student uses a BYOD device, we limit that right now to just Internet access. However, we'll soon be moving to the same level of access regardless of device."

Oyster River is also benefiting from another Aruba technology, Aruba AirWave Network Management. With AirWave, Olstad can optimize the district's wireless network from the same centralized platform as ClearPass.

But that's not all. Combining AirWave with ClearPass enables Oyster River to give teachers, students, staff members and guests an exceptional network experience. "Whether it's an enterprise device, like a tablet, or a consumer device, like an e-reader, we know what's on our network," says Olstad. "And we can optimize settings for each device type."

Additionally, Oyster River's Aruba infrastructure permits the adoption of new types of learning technologies. "Before, when staff and administrators approached me about Apple TVs, I had to tell them we couldn't support them," he says. "With Aruba, we can. And we're confident the network will provide the high-quality experience our end users want."

Meanwhile, the new Wi-Fi network has enabled Oyster River to become device-agnostic. "Previously we weren't really an Apple district," says Olstad. "Getting an iPad connected was a nightmare. With Aruba it's simple and secure."

"Also," he adds, "we know students and staff can now rely on our wireless network for connecting with their personal devices as well. In fact, we can see over 400 iPhones connecting to our network – all of which are personal devices."

EXCEPTIONAL EXPERIENCES FOR ALL

In short, Olstad credits Aruba with providing excellent connectivity, visibility, optimization and management. "Before, I couldn't have told you what was connected to our network," he says. "Now we get a really good breakdown on each type of device. Because we can see how devices are being used we can optimize the network to give everyone the best experience."

Indeed, teaching and learning at Oyster River is vastly improved. "Teachers now see technology as a valuable tool because they trust it will work," Olstad says.

District educators enthusiastically agree. "Recently I was editing a paper with a student," say Heather Stanley, a high school special education teacher at Oyster River. "The student was watching me edit on his own device. He was also responding within the same document. It was so fast the student stayed focused – which can be a struggle for my kids – and this allowed us to accomplish of five or six different educational goals all at one time."

Amanda Zeller, a seventh-grade language arts teacher, concurs. "The ability to depend on our technology opens up resources to drive my teaching," she says. "Before it was a fringe benefit, but only if the connectivity was good."

As for high school science teacher Lawrence, he's now using technology to save time. "Having a network that remembers mobile devices saves me precious minutes during time-sensitive activities," he says. "That's huge."

According to Olstad, Aruba Networks is a home run for Oyster River. "Before, I'd only hear about the network when it was broken," he says. "Now, every time I see our middle school principal he talks about how great the network is working — and he connects with multiple devices."

"Overall," he adds, "Aruba's given us much more than we ever imagined."

ABOUT ARUBA NETWORKS, INC.

Aruba Networks is a leading provider of next-generation network access solutions for the mobile enterprise. The company designs and delivers Mobility-Defined Networks that empower IT departments and #GenMobile, a new generation of tech-savvy users who rely on their mobile devices for every aspect of work and personal communication. To create a mobility experience that #GenMobile and IT can rely upon, Aruba Mobility-Defined Networks™ automate infrastructure-wide performance optimization and trigger security actions that used to require manual IT intervention. The results are dramatically improved productivity and lower operational costs.

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