

CASE STUDY

ARUBA WI-FI & MS LYNC HELP MAKE COLLEGE DREAMS COME TRUE AT YES PREP

Dedicated to empowering low-income students, YES Prep successfully leverages Aruba WLAN's high QoS to deploy Microsoft Lync* and UC telephony to assist with achieving a 100 percent college acceptance rate.



With his total IT staff of seven serving a rapidly-growing school system spread over much of Houston's 600 square miles, Troy Neal needed a reliable, scalable, low-maintenance wireless network to carry all district traffic, including Microsoft Lync* unified communications.

"When Hurricane Ike took out almost our aging private-branch exchange (PBX) phone system, we only had five schools and needed a system that could enable growth cost-effectively," says Neal, Director of Information Technology at 9000-student YES Prep, an open-enrollment charter school system headquartered in Houston, Texas, dedicated to helping close the achievement gap for low-income communities.

Upon investigating the options, Neal discovered an entry price for IP telephony would be about \$100,000 and a new PBX \$80,000. "Given our goals for adding new campuses, that type of expense was out of the question," says Neal.

ARUBA AND MICROSOFT LYNC: ENABLING ROBUST UC TELEPHONY TO FIT ANY BUDGET

Then YES Prep discovered the affordability and resilience of running Microsoft Lync over an Aruba Networks WLAN. "The total initial cost was less than \$3,000 per existing campus," Neal says.

BENEFITS

- Pervasive Aruba WLAN permits deploying MS Lync,* providing teachers, administrators and staff with real-time connectivity.
- Deploying Aruba Wi-Fi helps save about \$80,000 on the cost of a new PBX.
- Reduces the telephony costs of new campuses to under \$2,000.
- Enables smooth and seamless transition to 802.11ac, the latest Wi-Fi standard.
- Provides the ability to integrate Lync SDN API with Aruba's UC dashboard for granular visibility and QoS, simplifying operations and reducing costs.



"With our Aruba WLAN, it takes less than \$2,000 to establish a new campus with a full Microsoft Lync voice and web conferencing."

Troy Neal

Director of Information Technology, YES Prep

While the cost and benefits of deploying Lync were immediately apparent, YES prep also needed a robust Wi-Fi network that was optimized for unified communications (UC).

This led YES Prep to invest in Aruba access points (APs) and controllers late in 2008. "Within two weeks we had the wireless network and Lync up and running for our entire organization," recalls Neal. "We gave teachers laptops with webcams, which became their phones."

Wi-Fi Infrastructure Serves as a Foundation for Rapid Growth

Just a few years later, YES Prep has built out its system to include nearly 500 fixed APs for the 13 schools it runs today. It also leverages about a dozen Aruba Remote APs (RAPs) for its staff in Memphis, Tennessee, where employees are preparing to open YES Prep's first campus outside of Texas and the Houston metro.

"We're on track to open five more campuses in Houston and six campuses in Memphis during the next few years, almost doubling our educational footprint," says Neal. "So it's important to keep improving our ability to work together, while controlling costs and always making disaster recovery a priority."

LEVERAGING GIGABIT WI-FI WITH ARUBA 802.11AC

As YES Prep moves into this expansion phase, it will also upgrade its WLAN to the 802.11ac Wi-Fi standard. Commonly known as Gigabit Wi-Fi, the 802.11ac standard not only offers the organization three times the performance, or 1.3 Gigabits per second (Gbps), for newer compatible devices but also significantly boosts speeds for older devices.

Gigabit Wi-Fi Contributes to Student Achievement

As components of Aruba's architecture, 802.11ac APs will help YES Prep meet the needs of its #GenMobile students, teachers and staff. #GenMobile is the new breed of technology users defined by their preference for mobility.

"Although we serve low-income learners, many of our students carry smartphones," says Neal. For example, YES Prep permits senior students to bring personal devices on campus to assist with the college application process.

"Since our inception in 1998, 100 percent of YES Prep seniors have been accepted to a college or university," Neal explains. And, within five years of leaving high school, 82 percent of YES Prep alumni have either graduated or are still enrolled in college.

"Closing the technology gap, by providing access to online resources, is an important component of our mission to promote student achievement," says Neal.

“Wireless network reliability is critical to our success”

ARUBA UC DASHBOARD + LYNC SDN API = BETTER QOS

A key feature of Aruba's technology is its UC dashboard, which boosts efficiency by giving systems and network administrators a common management platform. Further, the dashboard fully integrates with Lync's Software Defined Networking (SDN) API, for granular visibility and QoS.

Together, the Aruba UC dashboard and Lync SDN API offer organizations like YES Prep high-quality UC collaborations over the Wi-Fi network while simultaneously simplifying operations and reducing costs.

Adding Aruba's AirWave™ Network Management System provides further efficiencies and administration effectiveness. With the UC dashboard serving as the front end, the diagnostic tools in AirWave and Lync SDN API can be leveraged to optimize performance or pinpoint issues in both the application and wireless networking layers.

"With Aruba's excellent QoS [quality of service] capabilities, we never have voice issues related to our wireless networking equipment," Neal says.

ESTABLISHING NEW LOCATIONS FOR LESS THAN \$2K

Overall, YES Prep's pairing of Aruba Wi-Fi with Lync has abundant benefits. "Today, with our Aruba WLAN in place, it takes less than \$2,000 to turn up a new location with a full Lync voice and web conferencing solution," says Neal.

Impressive Tools for Teaching and Learning

Educationally, impacts are impressive. "Before, our teachers mainly communicated with colleagues by cell phone and email," Neal recalls. "For educators to collaborate on a project, or meet to share information with their peers, it required ample planning and trekking across the city. This meant time out of their educational day and money from their pockets."

"Now, using Aruba and Lync UC, teachers attend virtual meetings from their classrooms as well as share and collaborate on documents whenever the need arises," he says. "In addition to boosting their professional development,

teachers improve lessons with a few clicks by bringing experts into their classrooms – whether from inside or outside our organization – by establishing a web conference and projecting it onto the classroom projection screen.”

For students, wireless infrastructure enables experiencing Microsoft Office 365 on school-owned laptops. “All of our students use Office 365 to complete assignments, send emails, collaborate on projects and build digital portfolios,” says Neal.

Enabling a Mobility-Driven Device Model

Organizationally, YES Prep’s Aruba WLAN has supported the implementation of a mobility-driven device model for all 1,100 employees. “With the exception of a few people with desktop systems in our administrative offices, everyone else has a laptop,” says Neal. “Also, some educators and administrators are bringing in iPads and other types of devices.”

An example of the benefits from this model is the ability to efficiently and effectively use a cloud-based evaluation tool to ensure all schools maintain the organization’s high educational standards.

“Administrators can operate the tool from any mobile device,” Neal explains. “When they visit a campus, our leaders report metrics for areas of sufficiency and deficiency with the tool. Then, the results are used to ensure all our campuses are operating the same way.”

ARUBA WLAN BOTTOMLINE IMPACT: PRICELESS

According to Neal, YES Prep’s reliable Aruba infrastructure has been critical to the organization’s growth and success.

“Once we configure a controller and deploy AP’s, we only touch them again when it’s time to replace them,” he reports. “Such a reliable wireless infrastructure, both in terms of technology capabilities and physical product quality, is critical to the success of our organization.

“In short,” Neal continues, “our Aruba WLAN helps us with the smooth and seamless distribution of more information to more people.” This makes the educational experience even more positive for YES Prep students while significantly contributing to the organization’s ability to rapidly expand and impact even more young lives, despite exceedingly tight budgets.

“You can’t put a price tag on that,” he says.

ABOUT ARUBA NETWORKS, INC.

Aruba Networks (NASDAQ:ARUN) 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.

Based in Sunnyvale, California, Aruba has operations throughout the Americas, Europe, Middle East, Africa and Asia Pacific regions.

To learn more, visit <http://www.arubanetworks.com> or get real-time updates on [Twitter](#) and [Facebook](#). For the latest technical discussions on mobility and related solutions, visit Airheads Social at <http://community.arubanetworks.com>.

“ Our Aruba Wi-Fi enabled pursuing a mobility-driven device model ”

*Microsoft Lync becomes Skype for Business in 2015.