

CASE STUDY

INSTANT WI-FI CONNECTS COMMUNITIES AT ACTS

Multi-state ACTS Retirement-Life Communities deploys a secure, scalable, enterprise Aruba WLAN featuring Instant APs, ClearPass and AirWave to connect its staff, improve resident care and services, and reduce costs at communities spread across the East and South.



With the first wave of mobile retirees beginning to move into active adult residential settings, James Clark sought to continue his organization’s tradition of innovation by bringing leading-edge connectivity to ACTS Retirement-Life Communities.

“We needed a high-performance, secure, reliable enterprise wireless network to enable us to provide a range of telephony, mobile device access, healthcare and other capabilities for our staff, external providers and residents,” says Clark, Corporate Director of Technology for ACTS, a multi-state, 28-location organization based in West Point, Pennsylvania.

“We needed a Wi-Fi network that would provide secure connectivity to our staff, help us deliver better care to our residents and reduce our operational costs,” he adds.

SEEKING TO MODERNIZE WI-FI

In a nutshell, ACTS sought to move beyond its existing limited system of about 200 legacy access points (APs) sprinkled across communities spreading from Pennsylvania to Florida. Instead, the IT staff at ACTS envisioned a pervasive Wi-Fi network with leading-edge management tools to support the organization’s 6000 employees and 8200 residents.

BENEFITS

- Pervasive, scalable enterprise Aruba WLAN enables 28-location organization to innovate care and services.
- Aruba Instant APs provide fast, zero-touch, self-provisioning with the capability for smoothly transitioning to IEEE 802.11ac.
- Mobility Access Switches enable cost-effectively scaling-out the Wi-Fi network.
- ClearPass and AirWave offer centralized, comprehensive, secure policy enforcement and network optimization.
- Mobility-Defined Network architecture permits future unification of wireless and wired networks.



“With our new Aruba WLAN, including Instant APs, ClearPass and AirWave, we have the controllerless and scalable enterprise infrastructure we need.”

James Clark

Corporate Director of Technology, ACTS Retirement-Life Communities

“A scalable and flexible Wi-Fi network was critical to continuing our history of excellence,” Clark says.

“We sought a single preferred vendor that could deliver an enterprise-class wireless architecture,” he adds. “We needed a solution that would support our current environment and our future plans.”

THE ANSWER: ARUBA INSTANT + MOBILITY ACCESS SWITCHES

After an extensive evaluation process that began with seven contenders and moved through RFI, RFP and table-top demonstration procedures, ACTS selected Aruba Networks for its controllerless Aruba Instant AP architecture.

“We sought a controllerless solution that offered advanced enterprise functionality and was easy to use,” explains Clark. “Aruba proved the best fit. Its Instant controller-less solution was far and above the most cost-effective way to deploy wireless for our distributed environment while still gaining enterprise-class functionality and ease of use.”

In all, ACTS will deploy approximately 4000 Instant APs and 300 Mobility Access Switches to create a robust, secure enterprise WLAN.

A key component of the Aruba Mobility-Defined Network architecture, Aruba’s Mobility Access Switches enable organizations like ACTS to extend role-based user access, security and operational simplicity available in its wireless network to its wired network as well. This capability is known as unified access architecture.

“The seamless integration of the Mobility Access Switches with other components of Aruba’s Wi-Fi solution, including Instant APs and management tools, was very attractive to us,” says Clark. “Additionally, the switches are very cost-effective compared to competitive solutions offered for the access layer. Overall, Aruba’s platform offered us significant benefits both in terms of enterprise capabilities and streamlining our environment.”

Zero-Touch Aruba Instant APs Enable Significant Efficiencies

With Aruba Instant APs, multi-facility organizations like ACTS 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 organizations with considerable resource savings, enabling IT staffs to focus on more mission-critical tasks.

“Once we determined our ‘gold standard’ configuration for access points and switch ports, the Instant APs were very easy to deploy,” Clark affirms. “After someone mounts the AP, you flip on the AP and it works.”



CENTRALIZING WIRELESS SECURITY AND MANAGEMENT

ACTS also invested in two comprehensive and centralized management solutions, Aruba ClearPass Access Management System and Airwave Network Management.

As significant components of the Aruba Mobility-Defined Networks architecture, ClearPass and AirWave infuse extensive visibility, granularity and security into network management.

Automating Policy Management with ClearPass

With ClearPass, organizations receive AAA (Authentication, Authorization, and Accounting) services. This assists entities like ACTS with comprehensively managing network policies, securely onboarding and managing devices and admitting guest users — all from a single platform.

Additionally, organizations can benefit from Aruba-engineered capabilities like ClearPass Exchange, which makes it easy for IT professionals to automate security workflows, and Aruba Auto Sign-On, which works with ClearPass to automatically log users into mission-critical applications freeing them from the repetitive username-password authentication process.

Optimizing Wi-Fi Performance with AirWave

ACTS is also leveraging Airwave Network Management, a centralized and comprehensive tool for optimizing the wireless network to provide excellent Wi-Fi experiences regardless of the type of end user — employee, resident or guest — or the make and model of mobility device.

Using AirWave, all types of businesses can gain critical and granular insights into the health score of their Wi-Fi network. This includes the types of devices logging on, the specific access points devices are connected to and the total number of devices on the network at any given time.

Further, AirWave's AppRF technology and intuitive dashboard feature allows IT staffs to identify and chart how applications are used on the network, which enables setting policies and throttling usage to ensure applications don't interfere with each other.

"We wanted the ability to rate-limit Wi-Fi usage to ensure we're not saturating the network," says Clark. "That feature of our new Aruba system is of considerable benefit to us."

MOBILIZING HEALTHCARE STAFF AND RESIDENTS

With its Aruba enterprise wireless network ACTS is laying the groundwork for a mobility-enabled workforce, commonly known as #GenMobile, as well as new generations of Wi-Fi savvy residents accustomed to Skyping with their children and grandchildren.

According to Clark, new network allows ACTS to fulfill its vision of having every employee connected to the network, whether via company-issued or personal mobile devices. In addition, this Bring Your Own Device (BYOD) strategy will allow residents and guests to use personal mobile devices to connect and communicate.

"In the past, our staff was unable to use mobile devices because our connectivity was insufficient," says Clark. "Now we can optimize operations because we have wireless coverage."

Improving Operations and Outcomes

Just one example of the way mobility will improve operations and outcomes is bedside information entry in ACTS' skilled nursing facilities. "Before, a nurse would write down information, take it back to a fixed workstation, and enter the data into the computer," explains Clark.

“ Aruba proved the best fit ”

"With mobile devices," he continues, "a nurse can all get done right at the bedside. This will be more efficient, save time and reduce data entry delays or errors. When staff can spend time and energy on residents, rather than data entry, it can take the care we provide our residents to the next level.

Another example is remote resident monitoring for health and safety, says Clark. "We'll be looking at health sensors, and other types of devices, that can continuously gather information on our residents."

On the resident lifestyle side of the equation, ACTS is now attractive to seniors that utilize the Internet for various forms of communication and recreation. "Some of our residents rely on Wi-Fi access to communicate with their families," says Clark.

LEVERAGING WI-FI FOR NEW SERVICES

In addition to opening up new opportunities for resident care and lifestyle enhancement, ACTS can improve telephone service in its skilled nursing areas.

"Previously, we were unable to provide telephone service to each resident room in our skilled nursing facilities," explains Clark.

Now, ACTS is taking advantage of its Aruba solution to also carry voice communications. "In our skilled nursing facilities we're using analog telephone adaptors (ATA) in combination with the Instant APs to deliver telephone service to resident rooms," he says.

More Options, Less Cost

What's more, ACTS is improving telephony at a significant savings. In all, Clark estimates his organization is saving on wiring costs at an estimated rate of \$15,000 per location.

"Instead of running cable into each skilled nursing care room, we're leveraging our Aruba wireless solution to provide phone service at a fraction of the cost," says Clark. "In the future, we can move to VoIP telephony using our Aruba wireless network."



“With our new Aruba enterprise architecture we have the framework to continuously add next-generation technologies,” he adds. “We now have the infrastructure to enable our business to improve our communities to benefit current and future residents.”

No matter what other initiatives the future holds, ACTS now can meet 21st Century resident care and active lifestyle needs.

“In addition to our staff members and residents accessing the network, we can also offer connectivity to our attending physicians, residents’ families and other guests,” Clark says. “We’ve been ramping up our deployment and now we’re starting to hit full stride.”

ENABLING NEXT-GENERATION TECHNOLOGIES

Looking forward, ACTS plans to continue standardizing on Aruba enterprise infrastructure at all locations for added efficiencies and services. The Aruba deployment will also enable the continued introduction of new technologies to enhance resident, staff and guest experiences at ACTS communities.

Stepping Up to 802.11ac

One planned initiative is stepping up to the latest wireless AP standard, IEEE 802.11ac, commonly known as Gigabit Wi-Fi. With 802.11ac organizations can achieve multiple business goals while providing users with the best wireless experiences.

“Because we’ll be moving to 802.11ac, it was important that our chosen vendor could support a smooth transition,” says Clark. “Aruba provides us with just such capability.”

Envisioning the Benefits of Indoor Location-Based Services

Another project on the ACTS road map is adding indoor location-based services like those offered by Aruba’s Meridian Mobile Apps. “We’re considering how we can leverage location-based services to improve outcomes for our residents, staff and guests,” says Clark.

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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