Aerohive
NETWORKS

Brookdale Senior Living

Assisted Living and Retirement Community Leader Delivers Higher Levels of Care with Wi-Fi and EMR, and Provides Wireless Internet Access to Residents

Challenges

- Needed a WLAN that offered resiliency, reliability, and performance and at the right price
- Needed a wireless LAN architecture that would be easy to manage, minimizing the support impact on a limited engineering team
- Needed a versatile WLAN to make electronic medical records applications portable and also provide wireless access to Brookdale's guests and families
- Needed a WLAN that would meet compliance standards for secure healthcare environments

Results

- Chose Aerohive because its Access Points (Aerohive APs) running 802.11n technology required no network controllers
- A single Aerohive HiveManager Network Management System NMS provides centralized configuration and monitoring and simplifies provisioning for system-wide policy management
- Engineering team has so far purchased more than 1,000 Aerohive APs for about 55 sites
- Brookdale has plans to purchase about 6,000 Aerohive APs over the next five quarters to deploy WLAN's to all of its 645 communities

Brookdale Senior Living is the largest provider of senior housing and senior care in the industry with more than 645 assisted living and retirement communities in 35 states across the nation. Each day, about 46,000 Brookdale associates serve nearly 60,000 residents in a variety of settings. The company's services include assisted living, memory care, skilled nursing, independent living and therapy services.

The senior living and senior care provider is always looking to state-of-the-art technology to increase the productivity of its staff, continually improve the quality of patient care, and provide wireless access to its clients and their families.

But like many senior living organizations, Brookdale Senior Living has a limited engineering team. These constraints are challenging, but Brookdale nevertheless recognized that it needed a next-generation wireless LAN to reach its far-flung facilities, to provide wireless access within those facilities, and to help the company realize the value of its other technology initiatives.

The Challenge

Healthcare facilities spread all over the country often pose challenging environments for WLANs, and those operated by Brookdale Senior Living were no exception. The Brookdale communities range from a site with 20 beds, up to sites with 800

beds. After evaluating the situation, Chris Fadrowski, Senior Director of IT Infrastructure for Brookdale Senior Living, said there were several main drivers for Brookdale's wireless-upgrade project. One main driver is to be better positioned to provide a higher level of care and accuracy, and a big part of that is a need for electronic medical records applications (EMR) to be portable.

"We're finding mobility is key for our EMR applications. It gives us the ability to do bedside support and therapy in many locations, without having to be connected by a wire," Fadrowski said.

Another driver for the project is to provide Internet access to Brookdale's guests and their families, and in particular to give them easy access to applications such as networking for seniors and Skype. "This allows someone living with us to be wireless in various areas of our buildings and to Skype with a family member who may live four or five states away," Fadrowski said.

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>
> **—Chris Fadrowski**,
> Senior Director of IT Infrastructure, Brookdale Senior Living

Brookdale also needs its WLAN to meet HIPAA-grade security requirements, as well as comply with Sarbanes-Oxley. Brookdale may also have the need for PCI compliancy in the future as the company does more point-of-sale transactions. Other requirements for the new WLAN included resiliency, reliability, and performance. It must also be easy to manage, minimizing the support impact on a limited engineering team. And finally, the price had to be right.

Considering the Alternatives

Fadrowski and his team began an in-depth wireless evaluation process last year. Brookdale had been using wireless services from other vendors in about 12 to 15 communities, he said. But he was not satisfied with the controller-based limitations and decided to pursue a corporate WLAN solution that would be more cost effective and easier to manage while providing a high level of availability.

Three vendors were evaluated and tested —all of which had a controller-based architecture that presented a potential single point of failure, which was not an option for Brookdale. In those scenarios, if the controller failed, the WLAN failed. Brookdale didn't scrimp on the research. "When we do projects such as this we tend to do a lot of research. Fadrowski said.

While conducting research, the controller issue was a big one for the IT director. "We found that when we wanted to get into true enterprise wireless, we wanted to reduce costs by not having controllers in place," Fadrowski said. "In a controller-based solution … to deliver the functionality we required we had to have a controller here in Milwaukee (where the data center resides) and a controller in every community, thus raising costs quite a bit, adding to single points of failure, and having to build in more redundancy and more cost with controller-type systems."

During his research, Forrester analysts suggested looking at Aerohive. Another key moment came during a Long Term Care Industry roundtable that Brookdale's CIO attended. At the roundtable, Deborah Green, CIO of LaVie Administrative Services, said Aerohive solved the wireless problem for her company. (Check out how LaVie is using Aerohive here.)

Cooperative Control Wireless LAN Solution

Aerohive was dramatically different from the other products that Brookdale evaluated. Aerohive's cooperative control approach delivered enterprise-class Wi-Fi, network management and security without the cost, performance, and availability issues associated with controller deployments.

After careful evaluation of the Aerohive products, Fadrowski issued his findings. "When you're looking at all the enterprise wireless networks out there … they all have a number of features that we need. Aerohive was selected from the perspective of having a no-controller setup. They were more innovative than the others."

Praise for Aerohive Installation and Features

Brookdale's engineering team was impressed with Aerohive's ease of installation and high-quality documentation, which is thorough – even to engineers who are not wireless LAN experts. Brookdale has also had an excellent experience with Aerohive's responsive, knowledgeable, and nimble technical support team. During the evaluation period, Brookdale in particular noted how they were impressed that Aerohive CEO David Flynn paid a personal visit that led to in depth conversations of where they were going with wireless in the future.

In addition to the no-controller aspect, the price, performance, and the ease of setup, Fadrowski also has been impressed with other Aerohive features. "We found that Aerohive's HiveManager Network Management solution, which is the management application in which we do our heat maps, has been very accurate." Brookdale has the HiveManager NMS installed at its Milwaukee data center.

The Brookdale team has also reaped the benefits of working with SynerComm, a value-added reseller and Aerohive-partner, in various aspects of the project, to include ensuring that the Aerohive APs are deployed in the best spots in the various communities.

What's Next?

Brookdale began implementing Aerohive about eight months ago, and has 50 sites complete so far, Brookdale is so satisfied with Aerohive that the company is ramping up deployment. "We plan to deploy to all 645 communities over the next five quarters," Fadrowski said.

To date, Brookdale has purchased over a thousand Aerohive APs. How many APs will Brookdale need to hook up the entire company? "We're probably going to be upwards of 6,000 in the end," Fadrowski estimated.