



centers, Kane estimated a need for about 1,200 wireless access points (APs). This was an average of nine per facility with more or less required based on several physical plant variables. Centralized management and high reliability were essential in product selection, as there are rarely technicians at individual facilities to manage the WLANs. The solution also had to provide granular security to protect the flow of sensitive patient data. Finally, in an industry with perennially tight profit margins, the chosen wireless solution had to be cost effective.

### Cooperative Control Architecture from Aerohive

In its research, LaVie was dissatisfied with the controller-based architecture offered by many of the wireless LAN suppliers. "It was cumbersome and expensive," says Kane, "if a controller were to go down, all of the APs would go down, unless I put in redundant controllers. This would mean redundant controllers at every facility, which would be far from cost effective.

LaVie then evaluated Aerohive's WLAN solution, powered by its Cooperative Control Architecture. Aerohive's cooperative control access points (HiveAPs) require no network controllers or overlay networks. Rather, software in the HiveAPs enables them to self organize into groups called Hives. The result is enterprise-class network management and security without the cost, performance, and availability issues associated with controller deployments. "Once we looked at the HiveAPs, the other products couldn't compete against Aerohive," recalls Kane.

After researching Aerohive installations in other long term care environments, LaVie Administrative Services was convinced that Aerohive provided the best solution to suit its needs. In October 2009, phase one saw HiveAPs, purchased through Aerohive partner Accuvant, deployed in an initial LAS pilot program.

The focus on cost-effectiveness continued as installation alternatives were considered. Kane turned to local LaVie maintenance staff, when qualified, to run cabling and hang HiveAPs. "Once we get power to the APs, the HiveManager discovers the HiveAPs and we can push out the policies from our Atlanta office," says Kane. "That's a big win for distributed, remotely managed infrastructures."

The HiveManager was also instrumental in determining the number and placement of APs. "The planning tool within the HiveManager identifies what the environment is going to be like based on the information it receives," says Kane.

### Moving Towards EMR

Kane has implemented four pilot applications on the wireless LAN to date. The first uses a wall-mounted kiosk and a wireless USB connection located in corridors of patient care areas. This enables certified nursing assistants (CNAs) to incorporate electronic charting into the flow of patient care. Another application allows staff to administer medications, and electronically document from a mobile cart. A third application allows therapy staff to document treatments and response from a wireless tablet, wherever that therapy is delivered.

The fourth application offers secure wireless guest access to the Internet from mobile devices. Users are securely walled off from business and clinical applications and also from other guest users. "Even if an unauthorized individual were to gain access to the network, all they would see is the Internet," says Kane. "That's a feature that isn't offered out of the box on a lot of other solutions. Aerohive also enables use of a customer-provided click-through user waiver to reduce liability of guest wireless use." All applications are secured through firewalls built into the HiveAPs.

### Looking Forward

LaVie Administrative Services continues to implement Aerohive's HiveAPs in phases on a regional basis and in conjunction with EMR-related pilots. Full deployment is expected by late 2010 or early 2011.

To secure the wireless network, Kane is currently running Wi-Fi Protected Access (WPA2) on the HiveAPs, with plans to integrate authentication through Active Directory for a higher level of security. "All of that security integration and functionality is already part of the Aerohive solution," says Kane.



Contact us today to learn how your organization can benefit from an Aerohive wireless LAN architecture.

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