



Holly Area School District, Holly Michigan

School District Chooses Aerohive to Connect Apple Mobile Devices

Challenges

- Finding a voice over Wi-Fi alternative to expensive cell-based communication
- Creating a 21st century learning environment for its students by providing students with interactive learning tools and the apps that run on them
- Needed best Wi-Fi network for running a plethora of Apple mobile devices
- Needed Wi-Fi LAN architecture that is easy to deploy and manage, offers key security and performance benefits and is cost-effective.

Results

- Holly Area Schools is a Cisco shop but chose Aerohive for its controller-less architecture
- Aerohive Wi-Fi covers all Holly schools, allowing administrators make and receive phone calls via the Skype iPhone app
- Having devices on Wi-Fi rather than cabled network eases the support burden on the teachers themselves, and it maximizes classroom time
- Aerohive has enabled consistent user policies to be applied across multiple sites, and enabled the same user experience from building to building and campus to campus

It's no secret that many of Apple's biggest fans are teachers and students. But given the trend among schools to deploy Wi-Fi networks in order to support the iPad and other mobile learning devices, Apple is clearly gaining favoritism from the high-tech side of academia too.

Holly Area School District in Holly, Michigan is one of the schools leading the Wi-Fi charge.

The school district was facing several challenges that would be alleviated by deploying a Wi-Fi network:

Cost: Mobile devices were used by administration and staff, and yet cell phone reception was not available inside the buildings. The decision was made to move from Blackberry devices to iPhone 4s, but the cost of enabling 3G was prohibitive. The school district decided that a reliable voice-over-Wi-Fi solution was required to affordably solve its mobile communications problem.

"The Aerohive solution adds a key piece of technology that enables us to achieve our goals of 21C learning."

—Matt Mello
Director of Technology, Holly Area School District

"Tech support and other support staff were unable to make support calls within the building. And administration staff are on the phone all the time with parents," says Matt Mello, Director of Technology in the Holly Area School District. "With Sprint/Nextel we paid a great deal for iDen repeaters throughout our schools. When assessing iPhone deployment, AT&T estimated it would cost nearly \$100,000 to put 3G repeaters throughout our schools. That didn't make sense. We needed voice over Wi-Fi."

Education: Holly Area Schools wanted to achieve its goal of creating a 21st century learning environment for its students. This meant providing students with interactive learning tools and the apps that run on them with a goal of keeping the kids engaged in a way that old-school practices, such as pencils and paper (or even Windows-based tools) are not capable of achieving. Mobile devices are at the heart of Holly Area School District's 21C digital learning environment.

The solution would be a wireless network that could be optimized for voice traffic and seamlessly accommodate a plethora of Apple devices.

"Apple's heritage is ease of use and exceptional value. Aerohive's engineering, performance and support dovetail with Apple's innovative approach," says Mello.

The Solution

A visit to Apple's Cupertino campus gave Mello the nudge he needed to move forward with MacBooks, iMacs, iPads, iPhones, iPod touch devices and Apple's 21C digital media tools, thus necessitating the requirement to deploy a Wi-Fi network.

"We knew we needed Wi-Fi but the real benefits didn't connect for us until we went to visit Apple in Cupertino and we listened to the educational leaders who tied learning to mobility," says Mello. "This visit really accelerated my decision to go with Apple and to deploy Wi-Fi."

As for its Wi-Fi network choice, Holly Area Schools is a Cisco shop but chose Aerohive for its controller-less architecture and for several capabilities:

- **Performance.** "This means bandwidth," says Mello. "Users have to be able to get on the network, without interruption when they are doing something bandwidth-intensive."
- **Easy to manage.** "Can it be managed effectively and from a central location?"
- **Security.** "I have to be able to lock this network down so that not just anybody can get on there."
- **Easy to deploy.** "I like how agile Aerohive is. I can provision consistent SSIDs across the district and yet have different, user specific, profiles and security. There is a lot of flexibility enabled by that, and that was a major advantage over all the other Wi-Fi manufacturers there are to choose from."
- **Cost.** "Aerohive said I would save \$20,000 per controller over the cost if I were to go with the traditional controller-based Wi-Fi model. This cost-savings is actually doubled to \$40,000 due to the need to buy an extra controller for failover. Aerohive ended up saving me over \$40K compared to a Wi-Fi controller based solution. When coupled with the savings from not needing 3G repeaters, the total cost savings is over \$100K for Wi-Fi and iPhone call/message handling."

Holly Area School District has thus far deployed 175 Access Points (APs) across its seven-campus district, which is comprised of four elementary schools, one middle school, one high school and a multi-program campus.

About 100 iPads have been distributed for the students' use thus far, and there are about 20 iPhones in use by staff with a total of 30 wireless cell phones that are Wi-Fi-enabled. District-wide there are 1,500 computers.

However, the number of Wi-Fi-enabled devices is an ever changing scenario, says Mello. "That's what we have now, but this is changing everyday. We keep buying iPads like we are buying candy. Parents keep fundraising so we are finding ways to buy more of them. District, school level and Vocational Education budgets are being utilized for regular replacement of technology with Apple products going forward, as we shift away from less productive and more costly legacy solutions. Aerohive easily provides a well performed, secure and easy to manage connection for MacBooks, iMacs, iPhones, iPads and iPod touch devices.

The Results

Ranging from cost-savings to learning, Mello says the Holly Area

School District's Aerohive/Apple deployment is already yielding valuable results.

Now that Aerohive Wi-Fi covers all Holly schools, administrators make and receive phone calls via the Skype iPhone app. When outside the schools they utilize the normal 3G wireless signal, then when entering the building they toggle on the Call Forwarding to the Skype phone number and turn on the Skype app.

"Having the Skype client on the iPhone is huge," says Mello. "We make calls all the time via Skype. It works great and the cost is significantly less and provides added features."

As far as its need for enhanced instruction, communication and productivity, teachers are now bringing in their own smartphones and iPads and requesting to be granted access to the Wi-Fi network.

"They are using their own smartphone and iPad apps for augmenting their teaching practices," says Mello. The apps used in teaching, he explained, are for formative assessments, differentiated instruction and remote desktop control for truly mobile teaching in the classroom. Mello added "The Apple products deliver the highest level of engagement for the students and teaching staff. We are promoting a mobility experience connected to the internet anywhere that is one of 'enablement', versus strict limitations on computer and application usage".

Moreover, having devices on Wi-Fi rather than cabled network eases the support burden on the teachers themselves, and it maximizes classroom time. When laptop carts are wheeled around between classrooms, they need to be plugged in and booted up. Sometimes cables are put into incorrect sockets. With Wi-Fi, the devices are ready to go as soon as they reach their classroom destination and they are opened up.

"Because of Aerohive we can have consistent user policies applied across multiple sites and provide the same user experience from building to building and campus to campus," says Mello. "We have a good chunk of staff and teachers that move locations. They may use a MacBook in one building, close the lid, open it up in a new building and they are on the Wi-Fi network right away. Carts are checked out and moved around all the time. We want the devices on those carts to know where they are when they wake up and we want this to happen transparently."

As for improved education? Mello says the feedback he is getting early on in his Aerohive/Apple Wi-Fi deployment assures him the education experience has been vastly improved.

"I get compliments regularly from our teaching staff about how much they love the Wi-Fi with their new MacBooks, for example, an Elementary teacher recently told Mello how much he appreciates the new mobile technology and the flexibility provided by the wireless for group meetings with teachers, interaction with students and meetings with the Principal.

"I can do a night and day comparison between a traditional windows environment and Apple. We have seen an immediate jump in engagement and learning," says Mello. "The Aerohive wireless solution adds a key piece of technology that enables us to achieve our goals of 21C learning."



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

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