



# Fentress Architects

## State of the Art Architect Firm Turns to Aerohive for Security, Reliability and Coverage

### Requirements

- Reliable corporate wireless network to support its five offices.
- Required a secure wireless network allowing guest and corporate access to reside side-by-side.
- Coverage providing uninterrupted Wi-Fi access while roaming among multiple, spread out buildings.

### Results

- HiveManager simplifying management and creating a reliable business environment
- Secure guest and corporate wireless access enabled at each of the firm's five offices
- The ability to roam, and transfer large architecture files wirelessly, without losing coverage

### Challenge

A company that passionately pursues the creation of sustainable and iconic architecture is going to be a company that cares equally about the Wi-Fi network architecture running its business.

As a global design firm with offices in the U.S. and London, Fentress Architects is such a company. Founded by Curtis Fentress in 1980, the firm has designed \$26 billion of architectural projects worldwide, and is a dynamic learning organization, driven to grow its ability to design, innovate and exceed client expectations. Due to the nature of Fentress' business, clients flowed in and out of its doors daily, all armed with iPads and other personal mobile devices, to attend key architectural meetings.

These devices were Wi-Fi-enabled, and the clients who use them arrived at Fentress' offices with expectations of having access to a guest wireless network.

Meanwhile, the firm's requirement for a reliable corporate network to support its five offices — the Denver, Colo.-based headquarters plus remote offices in Washington DC, Los Angeles, London and San Jose, Calif. — was increasing as quickly as the requirement for a corporate WLAN.

"We have important people, such as city officials and community leaders, coming through these doors who need guest wireless access," said Tracy Matteson, Information Technology Manager for Fentress Architects. "We also have four remote offices that need centralized access to data, and we weren't about to start putting up cheap routers to handle this network scope."

The pressure was on for Fentress to find the right wireless LAN network for its global design needs.

### Considering the Alternatives

Fentress was a Foundry shop when it set out to investigate wireless network options to replace what Thomas describes as a pseudo WLAN.

The company selected Aerohive based on a recommendation from Illumen Group, a Denver, Colo.-based consultant specializing in high-end networking. They evaluated Cisco access points along with Aerohive and in the end decided in favor of the security, reliability and coverage offered by the Aerohive's Cooperative Control architecture.

"Reliability and coverage were check-list items," said Matteson. "We were rebooting Foundry APs pretty often. We also needed a security model that would allow us to achieve our goal of upgrading from WEP."

## Deploying the Network

With a small staff of three in its IT department supporting approximately 160 users, Fentress needed a WLAN that would help reduce, rather than increase, its workload — a “kind of a set-it-and-forget-it solution that we can control it through one database,” said Thomas.

At the time Fentress decided to go with Aerohive, the firm had two remote offices in addition to the headquarters in Denver where all the data was physically hosted. The company has since expanded to four remote offices, relying on Aerohive to simplify the process of growing a smaller “job-based” workspace into a fully functional office.

“Aerohive allowed us to do the very important task of easily bringing Wi-Fi into those office spaces,” says Matteson. “We needed something expandable, and to have the ability to easily manage the environment. If we open up another new office when we have new business, Aerohive is flexible in that regard.”

## The Result

Addressing its security requirement, Fentress has deployed its Aerohive WLAN with firewalled segmentation between the guest and corporate networks using Aerohive’s integrated security capabilities that are in every Access Point, and has enabled both guest and corporate Wi-Fi access per office.

Aerohive was able to help Fentress with coverage at headquarters, which the company describes as having a unique layout. Their Denver office takes up half a block, is spread across three different buildings (one of which is seven stories high), and so the goal was to provide consistent coverage across the layout.

Providing this coverage has been a key benefit given Fentress’ highly mobile work environment. “Given how our employees move around the office, it doesn’t matter whether they are on an iPad, laptop or iPhone and in the middle of transferring between APs — you don’t get dropped off and lose connectivity. Aerohive’s AP hand off works perfectly.”

Another benefit is that the Aerohive network can handle Apple’s Bonjour network protocol. “This allows our designers to share images or presentations on their iOS devices without any intervention from the IT department,” Matteson said. “The result will be quick, impromptu meetings. This scalability helps keep design ideas flowing without technology being a detriment.”

At the time of its Aerohive deployment, the firm transitioned from 802.11g to 802.11n, which provides Fentress with higher bandwidth transfers — a necessary requirement because architects use big files, sometimes more than 1G in size. “We held off on this transition until we deployed Aerohive because we didn’t want to upgrade to the current standard knowing our Wi-Fi implementation was out of date. It was a relief knowing we would get that higher transfer rate with our Aerohive 802.11n deployment.”

Fentress is using the HiveManager Network Management System (NMS) to manage its Aerohive network, although it leaves the management task itself to its reseller Illumen, due to its small staff size.

“We monitor the wireless network and manage client access, but if something is going on that we can’t get to, Illumen has the ability to go in there and fix it for us. It works almost like backup managed services.”

For example, if Fentress is having a problem with an AP or remote office during configuration setup, Illumen can resolve the issue remotely.

Fentress had a similar management arrangement for its previous WLAN, but finds Aerohive much more reliable and user-friendly “because we can see the entire network rather than pieces of it, like before.”



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