

Case Study - AeroGuard™ Provides All Wireless Guest Access for Comfort Suites

Guest Internet Access Enabled Hotel Wide Without Requiring the Installation CAT-5 Infrastructure

Sypherdata

Application Scenario:

The Comfort Suites in Charleston, SC, is a modern facility, conveniently located to both business and leisure points of interest in the Charleston area. The hotel consists of 150 rooms on three floors with indoor hallways, but was not constructed with Ethernet cabling to each guest room. The challenge for hotel management was to update their guest services with fast Internet access as an amenity without extensive remodeling, which in addition to cost would mean the inconvenience and activation delays associated with the onsite construction. Offering new services as fast as possible was essential in their competitive hotel market.



Figure 1: Comfort Suites, Charleston

Desired Outcome:

The hotel's management had two goals; *one, to implement ubiquitous standards based Wi-Fi coverage throughout the hotel for guest Internet access, and two, to accelerate the project completion as fast as possible before the busy Fall business conference season was to commence.*

For the VAR, Sypherdata, it became clear that a wired access point installation would not meet the desired installation schedule time frame. Their choices were quickly narrowed down to solutions that could provide building coverage without interior cable installations.

The capability of SOHware's AeroGuard MIMO solution to create all wireless networks was seen as an ideal way to address the need.

AeroGuard™ MIMO All Wireless Solution:

AeroGuard™ has the unique capability to enable all wireless networks with simultaneous access point and wireless backhaul connections between access points. Typically, the dedicated backhaul radio utilizes the 5GHz 802.11a band at data rates up to 108Mbps. This dual radio feature of AeroGuard™ allows the APs to be placed strategically throughout the building to create a fully wireless network that sustains bandwidth equivalent to a wired Ethernet infrastructure.

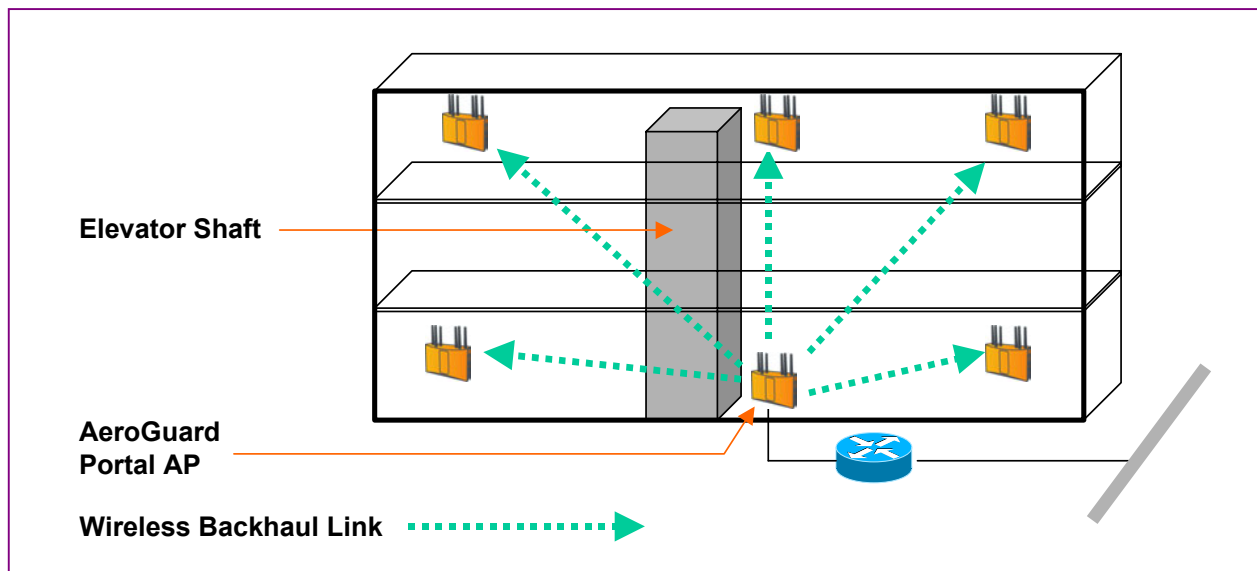


Figure 2: AeroGuard™ MIMO for Wireless Guest Access

The Comfort Suites installation was exceedingly simple for Sypherdata. First, they established a central AP in which the AeroGuard™ domain management feature was enabled, known as the 'Portal AP.' The Portal AP acts as the aggregator of the wireless backhaul links, and connects the WLAN to the network backbone router for DHCP. Then, the VAR placed APs in various locations throughout the hotel. One obstacle that concerned Sypherdata was the building's elevator shaft that divided the building approximately in half and created a concrete barrier that would normally mitigate conventional wireless LAN reception. However, upon site testing, it was determined that only five APs were needed to provide complete building coverage, even allowing to skip the second floor entirely, as shown in Figure 2. Remarkably, AeroGuard™'s MIMO technology was able to create a solid connection around the elevator shaft to establish high capacity backhaul links to the Portal AP at 108Mbps.

The total project installation time, start to finish, was accomplished in one day. The delighted the hotel management immediately set about testing the wireless performance throughout their hotel. Their findings, based on evaluating signal strength and quality for a typical guest Wi-Fi client (802.11b), was a solid 11Mbps within all 150 rooms of the hotel and in the lobby area.

An additional feature AeroGuard™ was able to provide that was of particular value for the hotel management was guest privacy. A built-in client isolation function ensured that each individual computer user was unable to view or browse other clients on the network, affording complete privacy for each guest throughout the wireless access domain.

The result for the hotel was a fully functional amenity based Internet access solution for their guests available from any location in the hotel, accomplished with a minimum of interruption.

For the VAR, AeroGuard™ meant not only exceeding their customer's expectations, but opened a new opportunity to differentiate their services with an innovative approach to network installations for their business customers.