

Case Study – Hilton Garden Inn Deploys Integrated MIMO Mesh Solution

AeroGuard's support for both MIMO performance and Mesh benefit VARs targeting high rise MTU properties

May 2006

VARs are finding one of the most challenging deployments for Broadband Wireless Access occurs at public multi-tenant (MTU) high rise properties typically found in urban centers. MTUs include apartments, hotels, and condominiums in multi-floor buildings. Often these buildings pre-date the installation of Ethernet and must undergo costly retrofit with cables to support access points throughout the property. This requires the VAR to get the end user to agree to extensive upfront costs, including wired infrastructure improvements and site survey planning that assures the final placement of APs will not require later repositioning and more wires.



Hilton Garden Inn – Washington D.C.

Application Scenario

SOHware recently completed a public wireless installation in the Washington D.C. metro area for a Hilton Garden Inn property. The hotel, a 6 story high rise in the upscale *Golden Triangle* area, required retrofit of Ethernet cabling to distribute high speed Internet services to guests. SOHware's VAR who managed the project was MSPX, a Virginia based IT services company who approached the project from the advantage of SOHware's integrated systems portfolio, which includes security, guest access management, WLAN, and supporting PoE switch technology. MSPX has learned from experience that older properties like this Hilton high rise present significant challenges in achieving profitability

while meeting the service expectations of property owners who demand premium Wi-Fi based services. The ideal solution needed to combine deployment flexibility, performance, and affordability.



Desired Outcome

To remain competitive in this busy hotel market, the property owner needed to offer building wide wireless access as an amenity. Guests would need to be authenticated to assure adequate bandwidth, with minimum complexity to the user yet strong enough to prevent unwarranted access from outside the hotel.

For MSPX, the *wireless solution needed to offer more* than basic access point coverage for guests. Installing Ethernet infrastructure to every AP in the building was going to be cost prohibitive, so the wireless solution needed to include its own backhaul capability that would offer flexibility as to final AP placement, plus, have the bandwidth to assure performance comparable to a wired backhaul.

Solution

SOHware's integrated portfolio is a suite of fully compatible solutions that are pre-qualified, simplifying upfront planning time and reducing technology integration risk. Using the integrated portfolio, MSPX was able to specify a complete solution after consulting with SOHware's FAE team, including authentication gateway and wireless solution. The hallmark of the integrated solution is the AeroGuard™ MIMO indoor access point with dual radios, which supports *wireless Mesh networking* with dedicated radios. AeroGuard™ MIMO Mesh enables the desired high capacity backhaul while replacing the need for Ethernet cabling between APs.



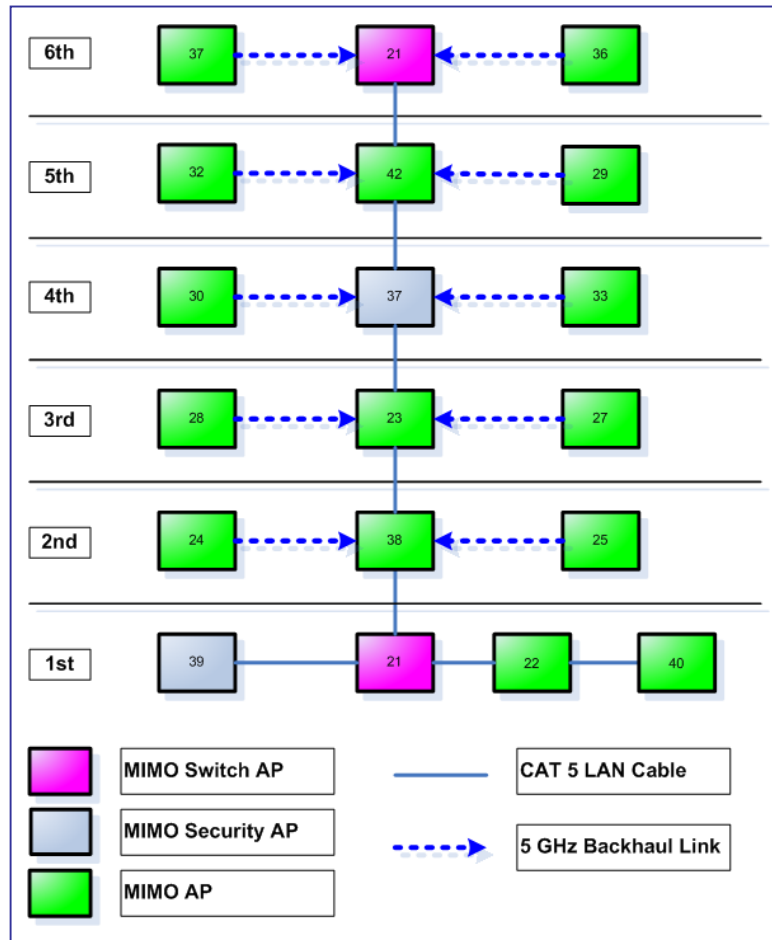
AeroGuard AGN1202
Dual Radio MIMO AP

The VAR, with SOHware's FAE assistance, designed the hotel network to include an Ethernet trunk that could easily be routed along the centrally located elevator shaft, where one AP per floor could be connected. Additional MIMO APs were then deployed along each floor to provide coverage to all guest rooms. These APs required no Ethernet cabling, instead relying on dedicated *5GHz wireless Mesh* links to backhaul to a wired AP. Without an Ethernet tether, these APs could be moved around to

find the optimal location and spacing density in response to the unique conditions of each floor of the hotel. As a result, MSPX was able to solve a normally complex RF environment with greater confidence to manage the unexpected, improving the VAR's overall profitability and customer satisfaction.

The key benefits that SOHware's integrated solution, including MIMO WLAN, brought to MSPX include the following:

1. *Highly reliable ubiquitous Wi-Fi access property wide.*
2. *Reduced upfront investment in upfront site survey analysis and installation labor.*
3. *Integrated, single source solution for the project.*
4. *Centralized remote management.*



SOHware's FAE Design-Win Solution Assistance
Includes Logical Network Diagram Development.

Key Features of the integrated solution include:

AeroGate Access Service Gateway

- Guest account generation
- Branded login screen
- Session and bandwidth management

AeroGuard MIMO Access Points

- Dual radio MIMO performance
- 5GHz Mesh backhaul
- WLAN Switch management

BroadSwitch L2 PoE Switches

- Power over Ethernet
- Web smart manageable

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