

Fall 2005

THE MAGAZINE OF THE CONTINENTAL AUTOMATED BUILDINGS ASSOCIATION



# Homes & Buildings



## DIGITAL LIFESTYLES

CABA'S Connected@Home event will focus on enhancing the digital lifestyles of connected consumers

**PLUS:**

Fiber to the Apartment

The American Digital Dream

DTV: Confusing our Customers

Interview with Leonard Ray, FTTH Council

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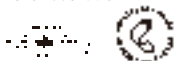
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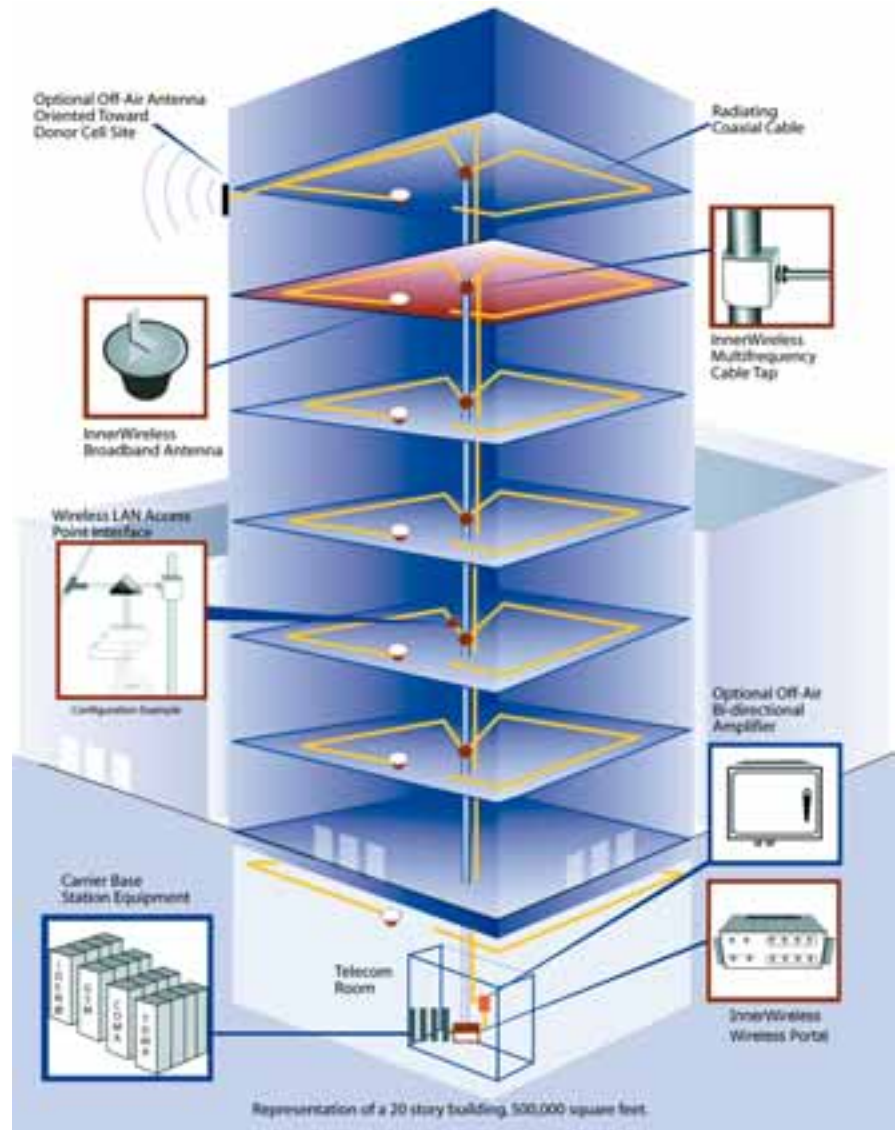
# USING A WIRELESS UTILITY TO MANAGE LARGE-BUILDING WIRELESS ENVIRONMENTS

An in-building wireless system that provides a full range of wireless services and applications becomes a new type of utility – a wireless utility.

By Ed Cantwell

AS WI-FI, CELLULAR, and other wireless applications have moved from “accessory to necessity,” large-building tenants now expect to have full access to their wireless services anywhere in the premise. But buildings are hostile to radio frequency, the basis of wireless applications and devices. Stout construction and building materials, such as steel, thick or mirrored glass windows, concrete, and multiple stairwells and elevator shafts degrade, dilute and obstruct wireless signals, making uniform coverage virtually impossible without a dedicated in-building wireless system.

An in-building wireless system that provides a full range of wireless services and applications becomes a new type of utility – a wireless utility – enabling tenants, maintenance and security staff, and first responders to use two-way radios, BlackBerry devices, cellular phones, and even wireless building automation controls in the same manner they use other standard utilities such as electricity and HVAC. A true wireless utility is a platform upon which all of a building’s wireless applications and devices can be managed, thereby avoiding the chaos created by multiple, single-point wireless solutions. Having a wireless utility is a key differentiator among properties because it not only increases a



building’s value, but it also draws the attention of prospective tenants and entices current tenants to renew leases.

New York City’s 2.8 million-square-foot, mixed-use Time Warner Center is an example of a building that has installed a wireless utility to

better meet the needs of its tenants and become a true 21st century building. Located at the city’s historical midtown Columbus Circle, the 750-foot twin towers are home to AOL Time Warner’s world headquarters, CNN’s live broadcast production studios, the Five-Star

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CONTEMPORARY CONTROLS

Mandarin Oriental Hotel, a high-end retail shopping mall, One Central Park Condominiums, The Residences at the Mandarin Oriental, and Jazz at Lincoln Center, which includes three performance venues totaling 1,970 seats. Wanting a truly world-class wireless environment, David Heckaman, regional director of technology for the Mandarin Oriental Hotel Group during the hotel's construction and opening, sought a broadband in-building wireless communications system that would facilitate the wireless and emergency preparedness needs of the hotel.

Heckaman and the Time Warner Center technology team chose to install InnerWireless' Wireless Utility, a unified strategic wireless platform. The high volume of visitor and tenant traffic passing through the building each day makes effective and reliable in-building communications imperative to maintaining security and safety, and InnerWireless was the only in-building wireless platform that could support virtually any radio-frequency protocol evenly and efficiently, over one system.

Installing the InnerWireless system was a cost-effective way to accommodate the wireless services needed in the Time Warner Center. In addition, services beyond what the IT team originally envisioned can be added without having to install a separate system and disrupt the building and its tenants. The Mandarin Oriental's hotel staff utilizes the system for numerous applications such as BlackBerry devices to expedite guest services. In total, 13 wireless applications, including cellular/PCS, paging, push-to-talk radio and WiFi, are distributed throughout the Time Warner Center, providing tenants, guests and building staff with full access to the wireless applications and devices they depend on.

In addition to enabling wireless signals for business and personal use, InnerWireless' Wireless Utility also enables two-way radios used by building security personnel. The Time Warner Center was being constructed during the 9/11 attacks, and upon learning that first responder radios were unable to operate in the World Trade Center Towers, Heckaman and the IT team knew that they needed to find a solution to prevent similar communication failures. With this Wireless Utility, the building's security staff has full radio function because the system carries the wireless signal throughout the building, eliminating signal dead spots, even in stairwells, elevator shafts and underground. The InnerWireless system is already used to empower emergency communications in other U.S. buildings.

With the increased dependency on mobile devices and the expectation to readily access information, InnerWireless provides a solution that can respond to current and future needs, thus its Wireless Utility is an integral part of making large buildings true 21st century facilities. The benefits of installing a multi-service wireless infrastructure in large buildings are significant because the Wireless Utility not only fulfills the wireless needs of tenants and guests, but it also prepares large buildings to take advantage of new and essential wireless services as they become available, while improving safety by enabling emergency communications. For more information about InnerWireless, visit [www.InnerWireless.com](http://www.InnerWireless.com). **i**

*Ed Cantwell is an InnerWireless founder and currently serves as its President, Chief Executive Officer and Chairman of the Board. Cantwell has more than 10 years experience in the technology industry, leading both large and venture-backed companies.*