Luxury Residents 'Blanketed' in Wi-Fi, IoT Apps: Ten Thousand, Beverly Hills, California

By blanketing its Ten Thousand property with Wi-Fi, Crescent Heights is easing how its Beverly Hills residents interact with technology. Our thanks to Diego Salas, CTO of Bel Air Internet and Brian Locks of Crescent Heights for helping gather information for this profile.

By Sean Buckley / *Broadband Communities*

Known as the capital of entertainment and fashion, the edge of Los Angeles's Beverly Hills and Century City neighborhood was a natural location for developer Crescent Heights to build its 40-story luxury apartment complex, Ten Thousand.

Often referred to as Beverly Hills 90210 – one of the area's primary ZIP codes that became synonymous with the 1990s teen TV drama – the neighborhood is the home of celebrities, luxury hotels and the Rodeo Drive shopping district.

When it comes to broadband, Crescent Heights tapped Bel Air Internet (BAI) to create what it says is a "completely holistic user experience." Residents can get gigabit internet and multi-room DIRECTV video services.

Brian Locks, systems manager for Crescent Heights, says BAI provides a service tailored to Ten Thousand residents' unique needs.

"Ten Thousand is Crescent Heights' premier, ultra-high-end luxury residence nestled near the heart of Beverly Hills," Locks says. "We cater to a unique clientele, so we partnered with BAI to create a more personalized, service-driven ISP experience."

To maintain service consistency, residents get individual, personal and private Wi-Fi networks. Propertywide connectivity enables residents to print documents in their apartments from iPads in the lobby or to stream music from the cloud while they lounge at the pool.

A key focus is ensuring a quality experience for users. The building is "blanketed in Wi-Fi," meaning all residents can access the internet regardless of whether they are in their apartments, at the pool, or in the fitness center. By using proprietary tools such as heat maps and network analyzers, BAI evaluated all potential Wi-Fi interference culprits from steel beams to energy-rated materials, such as glass windows, to create a network it says is "immune to the technological

Every resident of Ten Thousand has a personal Wi-Fi network to access the internet from anywhere on the property.

issues common in most residential high-rise buildings."

In addition to having instant internet access, every resident at Ten Thousand has a designated tech concierge who aids with connecting to personal digital devices and home entertainment systems.

Diego Salas, CTO of Bel Air Internet, says Ten Thousand's network was designed so residents can receive event notifications and interact with the building's staff.

"So, if you're at the pool and they want to let you know about an upcoming spin class, they can send you an update via the beacon technology we installed in the access points," Salas says.

Locks agrees and adds that high-speed internet is essential to enabling internet of things (IoT) services.

"Every resident we have has some IoT device," he says. "We have residents who bring in AV contractors to build out full Creston automation for their units. None of that would be possible without the wiring backbone and backend support from BAI."

To maintain network redundancy and uptime, BAI built a hybrid access

network of Siklu-based millimeter wave (mmWave) wireless radios and dark fiber. Salas says dark fiber enables BAI to have greater control over the quality of service because it can light and expand capacity as needed.

BAI receives real-time remote updates enabling it to proactively support the system. If the ISP notices a

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PROPERTY OF THE MONTH HIGHLIGHTS
~ Ten Thousand by Crescent Heights ~

- Super luxury apartments in glamorous ZIP code
- Individual, personal, private Wi-Fi networks
- Gigabit high-speed internet and multi-room DIRECTV service
- Ecobee3 smart Wi-Fi thermostat with hands-free temperature control via digital device

The many high-tech amenities include an app-based management portal that connects residents to the building's 80-person staff within moments.

lot of bandwidth being used in one area of the building, perhaps from a resident downloading several HD films, it can adjust the system so that speeds remain consistent for other residents.

Another difference about BAI is its traffic management approach. Because a large majority of its traffic stays on its own network versus being carried on the public internet, it has greater control over the customer experience.

"We keep about 55 percent of our total traffic off the public internet and put it onto the peering exchanges," Salas says. "Peering exchanges are important for us because they allow us to keep the latency extremely low."

Additional high-tech amenities include user-friendly touch-screen displays outside the building's elevator lobbies and an app-based management portal that connects residents directly to the building's 80-person staff within moments. Because of these capabilities, a resident can book a house car through the valet, request a restaurant reservation, reserve a private training session or schedule other services.

What's more, the building is served by its own robotic butler, CHARLEY,

which delivers minibar items to each residence. Residents also can access elevators using Schindler PORT technology with RFID sensors for controlled access to floors. Crescent Heights claims that it can save residents 20 hours per year in elevator waiting times.

But technology is only one part of the picture. Ten Thousand's one-, two-, three- and four-bedroom residences offer flowing floor plans and have access to natural light and panoramic views.

VITAL STATISTICS

Property Description: Ten Thousand is a 40-story luxury residential tower in the heart of Los Angeles with amenities that include a fleet of four robotic butlers, a wellness spa, indoor and outdoor pools and a one-acre private park. Ten Thousand offers one-, two-, three- and four bedroom residences as well as 75,000 square feet of indoor and outdoor amenities and an extensive service program.

Demographics: Affluent/high-end renters. Designed and constructed to

condominium-style standards, Ten Thousand's LA luxury apartment rentals offer residents the freedoms and conveniences of leasing within a thoughtfully programmed engineering environment.

Greenfield or retrofit? Greenfield

Number of units: 283

Style: High-rise

Time to deploy? The BAI buildout took approximately 30 to 60 days.

Date services started being delivered: Services began in the first quarter of 2017.

Special requirements: Crescent Heights wanted the property to be "blanketed" in Wi-Fi. Bel Air Internet incorporated its own Rover Wi-Fi internet technology in the Wi-Fi access points, which has a "find me, follow me" feature. This allows all residents and staff to move about the property on their own private Wi-Fi networks. Deploying this feature requires an extensive amount of security and safekeeping.

SERVICES

Services offered or planned on the network: High-speed internet access with multi-gigabit capacity. Residents also can access DIRECTV video services, telephone and common-area wireless. In addition, concierge, access control and building/home monitoring control services are available.

Providers: Bel Air Internet provides the wireless and phone services to residents, and DIRECTV provides video services.

Do additional service providers operate separate broadband networks on the same property? No

On the network described, can residents choose among multiple service providers? No

Technical support: Technical support is provided by Bel Air Internet. In addition, a Crescent Heights IT liaison is available to facilitate resident onboarding onto the portal.

BUSINESS

Which parts of the network are owned by the service provider, and which parts are owned by the property owner? The vertical infrastructure is owned by BAI. Horizontal runs and access points are owned by Crescent Heights.

Does the agreement include an incentive such as a door fee or revenue share? BAI has established a voice revenue share agreement with Crescent Heights. The voice revenue share consists of $4 per customer for each month the voice services are procured from BAI. Simply put, the voice revenue share is the distribution of the total amount of income generated by the sale of voice services.

How do the service provider and owner work together to market the services? What marketing approaches have been particularly successful? BAI's logo is included on the customized portal. BAI's Property Relations team routinely works with Crescent Heights staff to ensure residents are receiving a top-notch experience.

Is there a bulk-service agreement? If so, what services are included? Can residents upgrade from the bulk services? Bulk internet and bulk DIRECTV agreements are in place. Video package upgrades also are available. Each resident receives 1 Gbps of guaranteed bandwidth on BAI's private network.

TECHNOLOGY

Architecture: Fiber to the building with mmWave wireless backup. Bel Air has also implemented hybrid Ethernet/coax inside the building. Bel Air Internet used active Ethernet for data services and coax for video. BAI uses a mixture of Ethernet/Cat 5 and 6, coax and Wi-Fi to deliver signals to each unit.

Vendors/products:
Siklu (mmWave wireless transport radios)
Ecobee3 (smart Wi-Fi thermostats)
CHARLEY (robotic butler)
DIRECTV (Wireless Genie Mini devices)
Schindler (PORT technology for elevators)

LESSONS LEARNED

Answers by Diego Salas of Bel Air Internet and Brian Locks of Crescent Heights

What was the biggest challenge? BAI and Crescent Heights faced two key challenges: technical and support. The first was the implementation and activation of the DIRECTV Wireless Genie Mini (WGM) clients. A device that connects to the Wi-Fi service, the WGM enables residents to access their HD DVR services from any room. To enable the WGM, a DIRECTV Genie and a wireless video bridge (WVB) are installed in each unit.

A product of this magnitude requires a tremendous amount of support. Crescent Heights had to create an in-house position to help meet the demand for its Wi-Fi internet, DIRECTV video and BAI voice services. This support staff person can not only help residents set up their individual network portals, but also address any internet or video service issues.

What was the biggest success? Implementing BAI's Rover Internet technology at the property.

We're living in a world where people expect to wait an hour at the Apple Genius Bar to troubleshoot issues. People expect to wait an hour on their phone with their ISP. Our approach is the opposite. We can't express the level of resident satisfaction to having an on-site staff member who communicates directly with our ISP, who's savvy enough to take the guesswork out of technology. It's truly unique. This position is going to change the multifamily landscape.

What feedback does the leasing office get from residents? What has the experience taught them about marketing, installing or supporting these services? Residents love Bel Air Internet. The ISP's team works alongside Ten Thousand's staff to facilitate resident onboarding through a customized and intuitive portal/IoT portal for permanent smart devices in each dwelling.

For residents, it's an afterthought. Having the process so streamlined takes out the pain points of setting up the internet for them. Isn't that the absolute goal of technology – to make things seamless?

What should other owners consider before they get started on a similar deployment? Get the contracts in place as soon as possible to get the project rolling. Prepare yourself for the support requirements needed to deploy a network like this. A steep learning curve always comes with challenges. ❖

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