HEALTHCARE

CASE STUDY

Garden Spot Village implements campus wide Wi-Fi for active adults with HealthSignals[®] and Xirrus.

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XIRRUS

Founded in 1990, Garden Spot Village (GSV) is a licensed, non-profit provider of innovative housing and lifestyle services that enrich the lives of older adults.

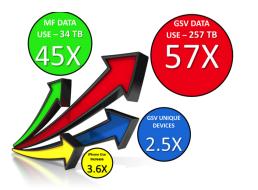
Its flagship community, Garden Spot Village is a 104-acre campus in New Holland, Lancaster County, Pennsylvania. The community features award-winning architecture and a variety of residential options, including cottages, carriage homes and apartments. The community also offers personal care services, memory support and person-centered skilled nursing households as well as adult day services.

The community has more than 40 social clubs and spaces to support them, including a technology lab and a wireless enabled model train room.

As a vibrant community, Garden Spot Village hosts several major athletic events. For example, each spring it holds the Garden Spot Village Marathon, a 26.2-mile USA Track & Field-certified Boston Marathon qualifier. In 2014, the event drew 1,200 participants. The community uses Wi-Fi to support registration and provide Internet access to participants, event staff and spectators.

Garden Spot also owns and operates Maple Farm, a household-model skilled nursing campus in Akron, Pennsylvania, about 10 miles from the New Holland campus. In addition to its residential offerings, Garden Spot provides healthcare services on campus, and Garden Spot Village At Home personal care and companionship services to residents of Garden Spot Village and the greater New Holland community.

Garden Spot Village has about 1,000 residents and nearly 500 team members at its two locations.



Growth of data usage and unique devices on the network after solution implementation.



Requirements

- Comprehensive Wi-Fi coverage thoughout
 104-acre property
- Easily extensible solution to adjacent 116-acre property
- Central management across multiple campuses
- A future-proofed solution for phased roll out
- Flexible and scalable solution to grow with the community
- High performance network for entertainment services, healthcare and buisness operations
- Robust network for video surveillance and building automation
- Extensible system for indoor and outdoor coverage

Solution

- 223 Xirrus wireless APs and Arrays
 - o XR-520: 2-radio access point
 - o XR-520H: 2-radio Outdoor AP
 - o XR-2420: 4-radio Array
 - o XR-4820: 8-radio Array
 - o 802.1x WPA2 encryption
- Fiber360 Wi-Fi Fiber Optic Backbone in all hallways in the entire campus
- 15 Enterprise-class Xirrus wired switches
 - o XT-5024: 24-port L2+ GbE switch
 - o XT-5048: 48-port L2+ GbE switch
- Xirrus Rapid Deployment Kit for Special Events
- Xirrus Management System (XMS) Enterprise
- HealthSignals Managed Services

Benefits

GSV - Garden Spot Village MF - Maple Farms

- Enable residents to access entertainment services such as Netflix, YouTube and Pandora
- Organize and manage outdoor events for residents and guests
- Robust Wi-Fi coverage for more than a 1000 residents, guests and team members
- Simplified management and visibility across multiple campus from a single dashboard
- Support growing demand for different kinds of client devices
 - o GSV campus: 69% smartphones, 23% tablets / laptops
 - MF campus: 50% smartphones,
 40% tablets / laptops

Innovation is a core value at Garden Spot Village. The organization sought a technology solution that would support advanced technology services for residents and other community stakeholders. The leadership team wanted:

- A centrally managed Wi-Fi system that provides comprehensive coverage throughout the 104-acre main campus, and expandable to an an adjacent 116-acre property as well as the Maple Farm community.
- A solution that would be "future proof," flexible and scalable to grow with the community, with a multi-phased rollout across all campuses.
- A high-performance network to support entertainment services as well as healthcare and business operations.
- A network sufficiently robust to run cameras, building automation, security and access control applications.
- A system that is easily extensible to provide both indoor and outdoor coverage for residents, team members and guests.

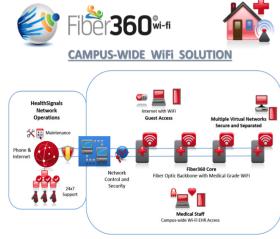
The HealthSignals solution of a Fiber360[™] Backbone with the Xirrus Access Points, Switches and Management System excelled at all of the above requirements. It provides superior management capability that allows a limited number of IT personnel to support multiple campuses and a large number of wireless devices. The Fiber backbone and the Xirrus Modular Arrays are key to ensuring that the network has expansion capacity built-in for the future.

The HealthSignals team designed and tested the network, and then trained the Garden Spot Village team on maintenance and administration tasks. The first phase of this deployment covered skilled nursing, personal care, dining and administration and community areas across both Garden Spot Village and Maple Farm campuses. Upon completion of the second phase of deployment, the Wi-Fi network will also cover all the residential living apartments. "The exemplary performance of the team and the network in Phase I gave us the confidence to go ahead with the entire campus Wi-Fi project," said Andrew Dietzel, director of IT for Garden Spot Village.

The Garden Spot Village network includes four virtual LANs: one for guests, two for residents and one for administrators. Garden Spot Village uses the Xirrus Management System (XMS) to monitor and assess the demands placed on the network. HealthSignals uses XMS to monitor and deliver an assessment of network performance and trend analysis each quarter. Based on this data HealthSignals makes appropriate adjustments to network configuration in coordination with the Garden Spot Village staff as part of the standard maintenance and support agreement. XMS enables administrators to view number of devices, types of devices on the network and the kinds of activities that are taking place on the network. Garden Spot Village also uses Application Control to gain insight on applications usage and most popular applications on the network.

"In addition to providing continuous connectivity to residents and staff, the Wi-Fi also supports voice communication in areas of the campus with poor cellular signals, such as the below-ground levels of the Garden Towers," explained Dietzel. Now residents and staff can reliably make SIP-based calls using the Wi-Fi from smartphones or Voice over WiFi enabled handsets, eliminating any problems caused by a spotty cell signal. The lower level of the Garden Apartments attracts many residents, as it is home to several recreational spaces, including a fitness wood shop and the model train room. In addition, the lower level houses many staff offices and conference rooms. "Reliable, high-capacity Wi-Fi in the lower levels is a necessity at Garden Spot Village, and our solution works extremely well here." he added.

"We have received extremely positive comments from our residents and staff about the speed and reliability of the Wi-Fi in the common areas, including the Healthcare areas. The Xirrus based HealthSignals solution is far superior to the personally paid services some residents have in their apartments. The excellent performance of the solution in Phase I has made it easy to continue with Phase 2 and beyond," said Dietzel. "The sophisticated management system along with the high-performance Xirrus Arrays and HealthSignals' Managed Services Platform, allows us to administer networks on both campuses as a single, seamless network."



Our "Future Proof" Optical Fiber Network Backbone ensures the speed and capacity for ever expanding Internet utilization.

" The Xirrus based HealthSignals solution is far superior to the personally paid services some residents have in their apartments." In addition to the current capabilities, Garden Spot Village plans to implement an electronic medical record solution to be accessed by staff members streamlining the delivery of quality health care to all residents. The comprehensive coverage across all campus buildings will also make it easier to support personal emergency response systems (PERS) and other mobile health technologies that that support greater health and safety for campus residents.

About Xirrus

With the explosion of smartphones and tablets, mobility has become ubiquitous. People expect to connect wirelessly where they are. Organizations depend on high bandwidth to send and receive voice, video and data, from any device to anyone. Our wireless solutions provide wired-like reliability, increased user density and capacity plus superior security. They perform under the most demanding conditions and have lower infrastructure requirements. When integrated with business and IT objectives, they help you do more than ever before.

At Xirrus, we apply the "best practices" of wired networking to wireless infrastructures by distributing the intelligence to the edge and operating software programmable radios. That's how Xirrus delivers the best performing, most scalable wireless solutions in the industry. It's a strategic IT infrastructure advantage that fuels organizations. Because Xirrus does wireless networks right.

About HealthSignals

HealthSignals® focuses on technology solutions for the 360° needs of Senior Living. Our Fiber360™Wi-Fi platform uniquely integrates Fiber and Wi-Fi to create a Medical Grade Wi-Fi utility. Our CareBlanket™360 integrates remote sensor data with a PHR and family portal, all of which are tightly coupled with a concierge solution. Our SeniorConnect360 enables engagement for the senior, from entertainment to social interaction.

For more information about HealthSignals, Fiber360 Wi-Fi, CareBlanket360, SeniorConnect360, or HealthCare applications using Xirrus, please contact Bruce Weintraub at 610-337-1333 or email bruce@healthsignals.net . Website: http://www. healthsignals.net/about-us/.

About Garden Spot Village

Founded in 1990, Garden Spot Village (GSV) is a licensed, non-profit provider of innovative housing and lifestyle services that enrich the lives of older adults. Its flagship community, Garden Spot Village, opened its doors in 1996. A resort-style community for residents 62 or better, it provides a dynamic environment where individuals and couples can pursue purpose-filled lives. Garden Spot also owns and operates Maple Farm, a household-model skilled nursing campus in Akron, Pennsylvania, about 10 miles from the New Holland campus.

Extraordinary amenities include a conservatory, indoor park and outside gardens with miles of walking and bike paths; a state-of-the-art wellness center with a heated indoor swimming pool, whirlpool spa and fitness room and a variety of dining venues. In addition to its residential offerings, Garden Spot provides healthcare services on campus, and Garden Spot Village At Home personal care and companionship services to residents and the greater New Holland community.

For more information regarding Garden Spot Village, please contact: Andrew Dietzel, Director of IT at adietzel@gardenspotvillage.org . Website: http://www.gardenspotvillage.org/about-us/.



1.800.947.7871 Toll Free in the US +1.805.262.1600 Sales +1.805.262.1601 Fax 2101 Corporate Center Drive Thousand Oaks, CA 91320, USA

To learn more visit: xirrus.com or email info@xirrus.com



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