



Zyxel Networks Powers the Mission to Establish Minneapolis as the First NFL City to Be Completely Covered by Fiber

Overview

US Internet (USI) has been providing wireless internet services in Minneapolis, making it the first large city with citywide WiFi coverage. Through Zyxel Networks' switches and wireless access points, managed via the Nebula cloud platform, USI ensures seamless connectivity to single-family homes, multi-dwelling units, and public WiFi. CEO Travis Carter highlights Zyxel Networks' reliable technology and dedicated support, enabling USI to deliver uninterrupted, home-like WiFi access throughout the city's streets.

Challenges

Since 2008, USI has provided wireless internet services to the city of Minneapolis making it the first large city to deploy citywide WiFi. According to Travis Carter, CEO of USI, the company is now in its 14th year of building a city-wide fiber network with the ultimate mission of establishing Minneapolis as the first NFL city to be completely covered by fiber. "The mission was to have a fiber optic cable in every square inch of the city to allow us to drive connectivity to wherever it was needed, including single-family homes, multi-dwelling units, public WiFi access points, city utilities, and water meter readers," Carter explained.

Solutions

Carter explained that he became aware of Zyxel nearly 40 years ago when dial-up internet was the technology and Zyxel was a company that manufactured one of the fastest dial-up modems. "I was well aware of Zyxel so as we started to put together the fiber optic network in 2009, I began reaching out to companies that I knew," he said. "One afternoon, I called Zyxel and told them what we were trying to accomplish, and they asked if they could send us some samples. We've been running on their platform ever since!"

Customer

US Internet (USI)

Industry

Service Provider

Location

Minneapolis, USA

Customer Background

US Internet (USI) began selling dial-up internet accounts out of the basement of an apartment in southeast Minneapolis in 1995. Though the company has evolved over the years to provide its customers with the latest technologies, USI continues to be an internet service provider today, offering innovative in-demand solutions including fast and reliable internet, networking, IT services, and hosting to residential and business customers.



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Travis Carter, CEO
US Internet

USI segments its customers into three categories: single-family homes, multiple-dwelling units, and the municipal WiFi network. "The nice part about the Zyxel Networks' platform is that it's very modular," Carter explained. "Zyxel Networks has a variety of switch families that help us meet a variety of connectivity requirements. For instance, the types of PoE switches we deploy in homes, MDUs, and on a pole to support public WiFi are different. Zyxel Networks' product portfolio provides us with different building blocks that allow us to build solutions when new opportunities arise." The access tier that Zyxel Networks provides enables USI to deliver speeds of Gigabit, 2.5 Gigabit, 5 Gigabit, and 10 Gigabit.

USI primarily uses Zyxel Networks' switches for the customer access component of the fiber optic network. According to Carter, USI has over 12,000 switches running in production with services for a variety of categories including single-family homes, multi-dwelling units, apartments, and businesses all being driven with Zyxel Networks' switches at the core. "That number will expand by thousands this year as we continue to roll out our services," he said.

Single-family homes – USI runs fiber optic cables from a central office where the Zyxel Networks' switches are housed, down the streets through the public rights-of-way, and into the homes where they will often install another Zyxel Networks' switch.

Multiple-dwelling units – Zyxel Networks' switches are generally installed in a communications closet or riser room and Cat 6 cables are run to each individual unit, enabling USI to provide each unit with speeds up to 10 Gbps. From the riser room, multiple Zyxel Networks' switches are daisy-chained to provide enough port capacity to support the size of the unit.

"If you envision providing service to a four-unit building, it's relatively easy to do it with one switch," said Carter. "However, a 500-unit complex requires multiple ISO switches to be placed around the building to satisfy those requirements."

Municipal WiFi network – USI deployed 2,500 Zyxel Networks' outdoor access points to create an outdoor WiFi access network that is provided as an ad hoc add-on service for the city of Minneapolis. Carter noted that during the pandemic, the outdoor WiFi network was opened up and more than 7,500 families used it for years for their primary internet access. Mounted on utility poles throughout the city, USI runs fiber optic cable up the poles to a Zyxel Networks' PoE switch which delivers speeds up to 10 Gbps and provides power to the Zyxel Networks' access point. "You can literally walk down the street and be connected to WiFi, similar to being connected to WiFi in your home, if you're in the city of Minneapolis," Carter said.

Carter explained that the deployment of the mix of thousands of Zyxel Networks' switches and access points makes a unified user interface critical in the management of the network and the onboarding of new switches, customers, and technologies. USI has integrated its products into Zyxel Networks' Nebula cloud networking management platform. Nebula Cloud Networking solution provides cloud-based, centralized control and visibility over all Nebula wired, wireless, security, and mobile router hardware. "Nebula Cloud has been a nice addition for doing configuration management, backups, and just overall management of our network so we no longer have to write the software and components internally," said Carter. "We can rely on Nebula Cloud to do our configuration, management, and maintenance of the platform."



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Travis Carter, CEO
US Internet

Results

USI has worked with Zyxel since 2009 and when Carter is asked why he's been so loyal to the company, he explained that it's Zyxel's people. "It's the people and the way they stand behind their products. If the internet goes down for 30 seconds, it's like the world's biggest issue, so you've got to make sure you have reliable technology," he explained. "The only way to have that reliable technology is to have people that stand behind it. As we find issues or we have ideas for products and services that we can deliver to our customers, Zyxel Networks' people are right there to help us along the way."

USI also enjoys the willingness of Zyxel Networks to understand the company's needs now and in the future. "We're going to be rolling out a new switch that Zyxel Networks put together for us back from a conversation back in 2020," stated Carter. "This new switch will allow us to continue to be state of the art. It fits into a metro fiber deployment that we have, so it's valuable that we're not reacting to what is available in the market. Zyxel Networks is helping us create the market."

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Product List



- XGS4600-52F L3 Aggregation Fiber Switch
- XS3800-28 L3 Aggregation Switch
- GS2220 Series L2+ Managed Switch
- XS1930 Series Lite-L3 Smart Managed Switch
- XMG1915-10EP Smart Managed PoE Switch
- XMG-105HP Unmanaged PoE Switch



- WAX655E WiFi 6 Outdoor Access Point
- ANT2105 Omni-Directional Outdoor Antenna

