Proxim Provides Broadband Services for Illinois Electric Cooperative.

Introduction

Covering a territory of about 2300 square miles, IEC (Illinois Electric Cooperative) was established in 1936 and has been providing public utility services. Furthermore, IEC tasked with the delivery of broadband services to residents and businesses commenced dial-up Internet service in 1996 and migrated to high-speed fixed wireless in 2006.

Challenge

Looking to provide higher customer value and at the same time gain higher returns from its in-house wireless internet service provider, IEC decided to upgrade its network infrastructure.

"When we started our fixed wireless internet service in 2006, a 1MB connection was more than adequate. Today, that won't even run their Netflix very well. We feel there is a constant need to keep pace with consumer expectations on bandwidth." - Sean Middleton, Manager of Engineering, IEC. "We already owned substantial tower infrastructure with legacy products at lower bandwidth capacity. We needed more bandwidth for the same base station and CPE price point as our legacy system."

Solution

Wireless Data Systems (WDS) was asked to recommend a wireless ISP solution with an ideal balance of high-performance and cost-effectiveness. After evaluating various wireless systems, WDS chose Proxim and deployed Proxim's wireless backhaul technology, point to multipoint and WiFi access points to e nable broadband service across a 10-county area in west-central Illinois.

"IEC approached us for a high performance network. Being an ISP deployment we were sensitive to the cost and commercial viability of the network. After our performance tests, it became clear that Proxim was the best fit."- Rick Greene, WDS.

For backhaul, about 50 Tsunami® QB-8000 and the recently released QB-10100 series radios were installed. For last mile services, over a 1000 CPE (Customer Premise Equipment) and about 50, high performance, Tsunami® base station units were installed, totalling to about 1200 radios. Additionally, ORiNOCO® Access Points are deployed for outdoor WiFi service. IEC engineering team manages this vast network with (PV A) ProximVision Advanced - a Cloud Based Carrier Management System and WLAN Controller in a single cutting-edge software platform.

"Proxim offered us bandwidth speeds greater than our legacy offerings with better noise mitigation. We were also very impressed with Proxim's provisioning platform and PV A software for management. None of the other wireless manufacturers had the same carrier class connectivity and throughput we were looking for with an organizing package such as PV A"- Sean Middleton

Why Proxim?

"The key to success in our industry is matching consumer expectations with products that are easily upgradeable, backward compatible, and allow for future expansion and flexibility while helping keep costs down. That is how we see Proxim adding value for us"

Highlights

- Established in 1936, IEC has been providing electricity and internet services.
- The in-house internet service decided to upgrade its existing network.
- Around 1200 Tsunami® point to multipoint and backhaul radios are installed. The deployment includes ORiNOCO® APs.
- The entire network is controlled and managed by PV A.

Wireless Data Systems, Inc.

Wireless Data Systems, Inc. - offers turn-key wireless networking services, including site surveys, microwave system design and engineering, network system design and engineering, equipment sales, installation and integration services. Designs include Point-to-Point, Mesh or Point to Multipoint solutions, System Backbone/Backhaul and redundancy as well as tower construction.

About Proxim Wireless

Proxim Wireless is a pioneer and global leader in advanced Wi-Fi, point to point, and point to multipoint outdoor wireless systems that deliver high performance and high availability communications.

With over 30 years of wireless experience, Proxim is recognized for its unparalleled reliability, superior performance and drive for innovation.

Result:

IEC has been able to cost-effectively upgrade its network infrastructure with higher capacity and using the same tower infrastructure. Due to improved network connectivity, IEC has increased its revenue as well as profits on it internet services.

"The engineering and installation expertise of WDS and Proxim allowed us to utilize the same vertical real estate to leverage a much greater consumer offering. Consumers have responded by placing demands on our business to upgrade the rest of our towers as quickly as possible. That is a good problem!" - Sean Middleton.