

Mobilcom Wireless Gains Carrier-Class Communications

Alberta, Canada



Customer

Mobilcom Wireless is one of Alberta's leading providers of mobile communications equipment and services, including cellular and PCS phones, pagers, mobile satellite gear, two-way radio products and broadband wireless access products. With 23 years of experience in the mobile communications industry, Mobilcom offers its customers a full spectrum of wireless solutions – equipment, technical support, in-house warranty servicing, and systems engineering and integration – to meet any wireless networking requirements.

The Situation and Challenge

Several of Mobilcom Wireless' customers had requirements for point-to-point broadband links, but a variety of obstructions and terrain made reliable connections impossible. Two customers had immediate needs:

Tribal Council: The Tribal Council of Alberta, located on a reservation, had a critical need to establish broadband Internet access to its headquarters building, but there was no means of attaining broadband in its isolated location. At the same time, a retail store on the reservation, located 2.7 miles (4.3 km) away, already had broadband access. Mobilcom's strategy was to deploy a wireless broadband link between the two sites. However, connectivity could not be achieved across the obstructed path.

Edmonton Corporation: Another of Mobilcom's customers was a corporation that needed broadband connectivity between its two Edmonton sites. The corporation was using private-line broadband services to connect the sites but required even more bandwidth to handle business-critical applications. Due to the steep increase in recurring monthly costs and the need for added bandwidth, the company approached Mobilcom to propose a reliable, yet cost-effective alternative to the private-line services.

Technical Requirements

- Establish broadband wireless communications between the Tribal Council's headquarters and its retail store located 2.7 miles (4.3 km) away, across a highly-obstructed, isolated path
- Deliver reliable, cost-effective, site-to-site broadband wireless connectivity in a highly congested metropolitan environment, while increasing the Edmonton Corporation's bandwidth

Deployment Detail and Interoperability

Mobilcom extensively tested the Motorola Point-to-Point Wireless Ethernet Bridges – 400 Series to provide point-to-point broadband connectivity in these two non-line-of-sight (NLoS) environments. In both scenarios, the PTP 400 Series links were quickly installed, configured and running traffic reliably, where other systems could not even establish a connection.

"The Motorola PTP 400 Series wireless broadband solution shines for obstructed or ugly paths."

~ Brian Napier, Director of Market Development, Mobilcom Wireless

The Results

Tribal Council: The Motorola PTP 400 Series bridge delivers a reliable broadband connection that negotiates 2.7 miles (4.3 km) of rolling hills and dense trees and foliage to deliver broadband Internet access to the Tribal Council of Alberta.

Edmonton Corporation: The PTP 400 Series platform provides a 99.999% (carrier-class) available, 3.6-mile (5.8-km) broadband link from South Edmonton to a two-story building in Edmonton City Center. Not only is the terrain uphill, but the line-of-sight is directly obstructed by two 20-story buildings, a large church and heavy commercial traffic. No other system tested was able to make the connection.

Why Motorola?

- Broadband wireless connections were not possible with other products due to the highly obstructed paths
- Motorola cost-effectively provided highly-reliable (carrier-grade) connections
- The PTP 400 Series solutions were installed quickly

About Motorola

Motorola is known around the world for innovation and leadership in wireless and broadband communications. Inspired by our vision of Seamless Mobility, the people of Motorola are committed to helping you get and stay connected simply and seamlessly to the people, information, and entertainment that you want and need. We do this by designing and delivering "must have" products, "must do" experiences and powerful networks – along with a full complement of support services. A Fortune 100 company with global presence and impact, Motorola had sales of US \$36.8 billion in 2005. For more information about our point-to-point products and services, visit our website at www.motorola.com/ptp.

At the time of this installation, the products deployed were the Orthogon Systems OS-Gemini point-to-point wireless Ethernet bridges. With Motorola's acquisition of Orthogon Systems, the OS-Gemini products were renamed as the PTP 400 Series bridges. They are now part of Motorola's **MOTOwi4™** portfolio of innovative wireless broadband solutions that create, complement and complete IP networks. Delivering IP coverage to virtually all spaces, the **MOTOwi4** portfolio includes Fixed Broadband, WiMAX, Mesh and Broadband-over-Powerline solutions for private and public networks.

MOTOwi⁴



For more information about the Motorola Point-to-Point Solutions:

Outside of North America: +44 1364 655500

In North America: +1 877 515-0400

www.motorola.com/ptp