Success Story:

Penn State University Community Gets High Bandwidth Fixed Wireless

Challenge: Need a building-to-building high-capacity wireless solution with low latency in a spectrum congested urban area

Solution: The EtherHaul-1200 Gigabit E-Band Radio

Benefits:

- Enough capacity to support multi-tenant dwellings
- High quality service delivery due to low latency
- Unmatched ease of deployment
- Abundant, interference free spectrum

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Getwireless.net is a State College Pennsylvania service provider specializing in high-capacity commercial fixed wireless and high-density residential service. They offer VDSL or Ethernet services ranging from 7Mbps to 100Mbps to multi-tenant dwelling units (MDUs) in the Penn State community, competing against incumbent service providers such as Comcast.

When the free space optics links Getwireless.net was using to serve high-demand buildings and as a platform for deployment to smaller buildings reached end of life, the provider started searching for a replacement.

The primary requirement was for high bandwidth with low latency. Resiliency was key, particularly in foggy weather, as well as predictable bandwidth availability. Deployment issues such as flexible frequency reuse, low license costs, and easy maintenance for individual field technicians were also considered.

Getwireless.net considered a fiber build out, optical PTP, unlicensed 5GHz and licensed 23GHz solutions. In the end Siklu's EtherHaul was selected because it offered quicker roll-out times than fiber, greater reliability than unlicensed solutions, a significantly lower cost compared with licensed solutions and greater resiliency and ease of deployment than free space optical.

"We chose Siklu because they offered a high-bandwidth, low-latency building-to-building solution, with low deployment/redeployment costs," said Michael Caldwell, CIO of Getwireless.net. "But what made Siklu our top choice was the dedicated spectrum. We provide service in crowded metro areas where spectrum is scarce."

Integration and deployment were performed by Getwireless.net engineering staff. Initial deployment took just one day of lab configuration and two weeks of field-testing, and then live traffic was migrated to the Siklu link. Soon after, once the Siklu link proved consistent operation and high performance, additional high-priority traffic was shifted to it.

"Performance was exactly as expected," said Caldwell. "Our time to repair sites drastically dropped with Siklu. Previously we had been using optical PTP bridges, which were bulky and required hours of configuration and alignment, even for equipment replacement. Siklu's radios are light enough to be very easily handled by a single technician. With the quick-release backplate we are able to configure and replace a radio within 15 minutes of arriving at a site. Amazingly, no realignment is required," he explains.

Getwireless.net expects to migrate additional sites to Siklu over the next year, as EtherHaul is uniquely suited to the provider's metro network deployment model. "EtherHaul is a perfect fit for environments that providers such as Getwireless.net face," said Ilan Moshe, head of North America operations for Siklu. "Our technology delivers high capacity, unmatched performance, and proven reliability, making it the best value in the market today."