

## Redline's Virtual Fiber™ System Enables 123Net to Deliver Reliable Premium Business Access in Michigan

### CUSTOMER



123NET, Detroit, Michigan

### INDUSTRY

Telecom Service Provider

### THE CHALLENGE

- Deliver high speed broadband wireless services to enterprises in dense cities throughout Michigan.
- Offer guaranteed SLAs at tiered price points.

### THE SOLUTION

- Redline's RDL-3000 broadband wireless system operating in the 5 GHz band.
- Redline's MetroLINK software to enable differentiated services.

### THE RESULTS

- High-speed broadband wireless services to enterprises and institutions throughout Michigan.
- Tiered, differentiated service offerings.
- A flexible wireless network capable of future growth.

You can only become a leading telecom service provider by offering the best services. 123Net, a telecom provider based in Detroit Michigan, built its reputation providing wholesale internet and telecommunications services to ISPs and enterprises who require unmatched performance and reliability. They pride themselves on offering services their customers can count on every time, no matter the location or requirement.

123Net was committed to growing its business by expanding their service offerings to businesses and institutions in the Metro Detroit area, but knew their fiber-based network didn't have the capacity to support the premium business access services their clients would require.

123Net also wanted to move quickly to satisfy customer demand, so they elected to add a wireless network to accommodate this growth. This wireless system would need to:

- Support very reliable high speed data services
- Allow them to offer service level agreements (SLAs)
- Be economical to install and operate
- Have the ability to grow incrementally as demand increases

### 123Net Grows Business Offerings with Redline

To meet its goals, 123Net selected Redline's Virtual Fiber™ Technology, a specialized broadband wireless system which combines the two-way bandwidth and low latency features of fiber with the flexible deployment capabilities of wireless. More specifically, 123Net deployed Redline's proven RDL-3000 family of broadband wireless systems. The RDL-3000 was chosen for their premium business access network because it fully met 123Net's stringent requirements for reliability, support for SLA options and ease of installation.

To deliver this new offering, 123Net installed an RDL-3000 unit at the customer premise. It in turn connected to another RDL-3000 configured as a base station, located many miles away. Cost efficiencies were realized as many RDL-3000 customer premise units can connect to a single base station. The base station is then wirelessly backhauled, also using RDL-3000s, to a point on the terrestrial network operated by 123Net where the service connection is completed.

The RDL-3000's small form factor offered a quick and easy installation both at the customer premise and as a base station. Its excellent non-line-of-sight

capability (ability of the system to deliver high throughput even when the antenna is blocked by buildings or trees) means 123Net can install Redline virtually anywhere, including in dense urban environments. This significantly reduced 123Net's costs and build-out time, which in turn translated into lower costs for their customers.

Redline's all-IP Ethernet architecture made it easy for 123Net to integrate it within their network, and Redline's MetroLINK software allowed 123Net to program the system to know which traffic groups should have more priority than others. This enabled the establishment of Quality of Service (QoS) profiles which allowed 123Net to confidently offer Service Level Agreements (SLAs), guaranteeing different service levels to a mix of customers using the same wireless link.

Service settings, including adding additional capacity, can be adjusted remotely for individual customers at any



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*"Delivering business-class broadband services in a dense urban environment with the rock-solid reliability expected from very demanding customers is daunting, but Redline's Virtual Fiber solution not only makes it possible, it makes it easy."*

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time without interrupting other connected users. This is a powerful advantage for 123Net because it means at any time they can adapt quickly to the changing needs of their customer base and offer a higher speed service to any customer who requests it.

This ability to remotely change how the system operates extends beyond changing capacity, it also allows 123Net to configure any radio to operate in point-to-point (PTP) mode for a backhaul solution or a dedicated link for a customer, or in point-to-multipoint (PMP) mode to allow several customers in the same area on one wireless link. Using the same hardware for different applications means lower inventory costs and better customer responsiveness.

Using Redline's broadband wireless solution for premium business access, 123Net has successfully expanded their business to include premium data services ranging from 10 Mbps to 100 Mbps for enterprise customers. Redline's Virtual Fiber solution enabled them to offer the flexible and powerful voice, data, and internet services they needed to profitably grow their business.

## ABOUT REDLINE COMMUNICATIONS

Redline Communications is the innovator of Virtual Fiber™, a rugged broadband wireless solution used by companies and governments worldwide to cost effectively deploy and manage distributed services and applications. Redline's resilient products provide machine-to-machine connectivity over wide areas in even the harshest environments, and are used to facilitate and enhance public safety networks, deploy and extend secure networks, and connect digital oil fields and smart grids. Redline has been delivering powerful, versatile and reliable wireless systems to governments, the military, oil and gas, and the telecom industry for over a decade through certified partners in the Americas, Middle East, and Africa.

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