

Scaling Multi-Site Networks: From Fragmented Infrastructure to Nationwide Standardization

A leading North American manufacturer transformed a fragmented, multi-site network into a standardized, reliable infrastructure with Paragon Micro.

With more than 80 locations across the U.S. and Canada, this leading North American manufacturer, fabricator, and distributor of architectural glass, glazing systems, and hardware partners with contractors, architects, and building owners to simplify construction and enhance performance through innovative products, specialized services, and integrated tools.



Fragmented Network Holding Back Growth

A North American manufacturer with dozens of service facilities had grown into an industry leader, but its IT network was holding it back. Wireless coverage was inconsistent, cabling was outdated and undocumented, and a legacy setup left the network inefficient and difficult to manage.

With limited internal capacity and a large, multi-site footprint to address, the company faced a crossroads: remain constrained by a fragmented, fragile network, or invest in a standardized, future-ready infrastructure.

A Vision That Required Action

Leadership wanted a network that could support seamless operations across all locations. They envisioned a system where connectivity was reliable, wireless coverage was consistent, cabling was fully documented, and the internal IT team had clear visibility and control. This modernized network would enable:

- ✓ Efficient multi-site operations
- ✓ Faster troubleshooting and issue resolution
- ✓ A stable foundation for future technology deployments

Turning a Plan into Progress with Paragon Micro

Aligning the Vision

Paragon Micro helped translate high-level modernization goals into a clear, actionable roadmap. They brought structure to the vision by defining standards for wireless, cabling, UCaaS integration, and Cisco Meraki—that could be consistently applied across all sites, ensuring each step of the modernization aligned with the overarching objectives.

Managing the Moving Parts

Paragon Micro's PMO oversaw schedules, Statements of Work, site readiness, procurement, and change requests across multiple facilities. Project managers applied Paragon Micro's in-house Continual Improvement methodology to maintain momentum, ensuring the project stayed on time and on budget under tight timelines.

Staying Flexible

Because all work occurred in live production environments, flexibility was critical. Paragon Micro's PMO adjusted schedules around site operations, handled after-hours installations, and adapted to on-site conditions, ensuring day-to-day operations continued without interruption.

What started as a small engagement quickly grew into a North American network modernization, as Paragon Micro demonstrated its ability to turn the client's vision into reality.

Deploying Resources

Once the framework was in place, on-site smart hands executed physical deployments at each location, while highly certified Network Engineers and Solution Architects led assessment, design, and configuration work. Senior project managers kept everything aligned, overseeing scheduling, resource allocation, reporting, and communications, all while actively managing risk.

Executing Under Pressure

Paragon Micro's delivery teams managed a complex hands-on rollout, rerunning fiber and copper cabling, stabilizing wireless coverage, resolving routing inefficiencies, integrating paging systems, and verifying licensing and configuration against best practices. All of this work was completed in live production environments under tight deadlines, minimizing disruption to daily operations while keeping the project on track.

Expanding the Partnership

As the project progressed, Paragon Micro became a trusted strategic partner. The organization gained a network that was modernized, documented, manageable, and scalable—positioned to support long-term growth across North America.

A Foundation Built for What's Next

The customer's network was completely transformed. Outdated cabling, poor wireless coverage, and inconsistent configurations were replaced with a modern, standardized network that performs reliably across all sites. Internal IT teams now have full visibility and control, downtime has been reduced, and the company can operate confidently across North America. What was once a major bottleneck is now a foundation for growth and operational efficiency.

www.paragonmicro.com/services



Nationwide Infrastructure Modernization at Scale

Fiber backbone and copper cabling reruns, wireless rollout, and communications upgrades across dozens of sites.



Operational Resilience and Speed

Standardized network design and upgraded systems reduced downtime, improved troubleshooting, and enabled faster response to business needs.



Full IT Visibility and Control

Detailed documentation and network mapping now give IT teams the ability to proactively monitor, manage, and optimize performance across the enterprise.