

Achieving Network Resilience in Retail Operations



On the eve of Retail's BIG Show 2016, Opengear's Todd Rychucky sat down for an interview discussing Opengear's experience working with retailers of all sizes – and why achieving network resilience has become increasingly critical in the industry. Opengear's **Resilience Gateway** product line continues to expand (including a new release to be announced at the BIG Show), and the company will be available to offer demos and discuss solutions with new and existing customers at Booth #831.

Q: How would you describe network resilience, and how does Opengear provide the tools to meet this demand?

A: Network resilience means ensuring and maintaining the overall positive health of your network infrastructure, no matter what. The goal of businesses in any sector is to have a network that "feels good" and is up and running 100% of the time. Opengear provides the tools to accomplish this through the use of techniques like proactive network monitoring, automatic alerting, and remediation if and when any issues arise. Customers deploy our best-in-class out-of-band management (OOBM) and cellular failover solutions at remote sites and data centers.

Q: When thinking about a retail environment specifically, when and why would a retailer need a resilient network and the ability to manage their IT and network infrastructure remotely?

A: We do business with many large enterprise retail customers, each of whom have anywhere from 100 to 1000 retail locations all over the world. It's critical for the network and sysadmin teams within these retailers to have remote access 24/7 to their sites in order to troubleshoot issues real time. OOBM over a cellular network provides these teams with complete access and control, even during infrastructure fault conditions and network outages. The result is that problems are remediated promptly and disruption and downtime minimized. Opengear's Smart OOB™ takes OOBM one big step further as we monitor and control everything that affects uptime at the remote retail site. With Smart OOB we have embedded the intelligence at the network edge to proactively analyze and immediately notify pending fault conditions, and we have embedded automated response capabilities that can automatically detect and repair common issues in the communications networks, power and IT infrastructure and the physical site environment. Smart OOB management remediates issues at the retail sites **before** they become failures.

The second big benefit of having always-on secure, resilient cellular connectivity to each retail location is Failover-to-Cellular™ (F2C) which ensures the store remains online and operational, even during a network outage when primary connectivity has gone down.

Q: What kind of impact does a network outage have on a retailer, and how can products with embedded wireless capabilities address this problem?

A: The impact of downtime for a retailer is significant. Without online connectivity, orders cannot be processed and any sales transactions become manual (if they can occur at all). Estimates on what downtime costs a retailer find that revenue losses can easily reach six-or-seven figures per hour. Downtime has a crushing impact on cash flow, stifles productivity, and damages a retailer's reputation and customer goodwill.

It is essential that retailers have a back-up (or failover) network connection in the event that a primary ISP connection goes down. The ideal failover solution is 4G cellular. It's available pervasively, it's affordable and it delivers ever increasing bandwidth. An F2C solution delivers transparent, automatic failover to ensure uninterrupted connectivity, and has automatic failback to restore primary WAN connectivity without manual intervention.

Additionally, an F2C solution can be provisioned simply and promptly, enabling retailers to more quickly get new locations up and running using the cellular connection as the primary while waiting for traditional wired connections to be installed.



Q: What kind of solution would you suggest to a retailer looking to strengthen their network resilience?

A: A retail enterprise network should ideally have both OOBM and F2C solutions in place, as you cannot remotely troubleshoot and remediate any network infrastructure, power, and environmental issues to prevent outages without an enterprise grade OOBM solution, nor can you ensure a retail location stays online without an F2C solution. Both solutions need to be in place to ensure business continuity for the retailer. And it's even better if you can have both solutions within a single appliance.

A Smart solution from Opengear is the best way for a retail business to strengthen its network resilience. The Resilience Gateway product line – with embedded 4G LTE connectivity – was specifically designed to offer the fastest and most reliable cellular connections so that transactions are completed quickly and without information loss.

Q: Are Opengear solutions really only suited for large retailers? Or could smaller retail operations benefit equally from these products?

A: Only Opengear sells Smart OOB and F2C solutions to a range of retail customers, from those with ten locations to those with a thousand. A small business with a few storefronts can sometimes feel the pain of network downtime even more than a larger enterprise can. One site can be 10% of their revenue. It's also true that larger enterprises often feel downtime more from a logistical standpoint, trying to manage down locations in Los Angeles, Toronto, and Berlin at the same time. In this way, capable, highly reliable networking solutions are critically important to retailers of all sizes.

Importantly, retail operations both small and large will only realize always-on secure, resilient connectivity and business continuity if they deploy **enterprise grade** solutions. We encourage retailers of all sizes build their distributed infrastructure with quality network routing and firewall solutions from quality enterprise suppliers like Cisco and Juniper, and not look to embed these mission critical functions in the cellular connectivity devices. We also counsel them to avoid cheap consumer grade cellular solutions which use external cellular dongles and source quality enterprise solutions with embedded wireless capabilities.