

A photograph of a retail store with rows of clothing on hangers, serving as a background for the title.

Bringing Cost Savings to a Worldwide Retailer

The customer experience is everything when it comes to online & in-store shopping. Yet there is so much that must happen behind the scenes to support everyday operations. Networking is one of these critical functions, and for a global retailer with worldwide locations, optimizing their distributed connectivity is a top priority. They require a responsive and reliable network to maintain up-to-date stock availability, keep customers informed, and quickly process transactions for a smooth experience.

The Challenge

The retailer was using traditional infrastructure solutions that were becoming burdensome to business — especially during a time of growth and expansion.

With MPLS lines as the main link at each location, operations were slow and costly. Their distribution networks lagged due to latency and required frequent support. In stores, customers were waiting too long for product availability, and those making purchases were met by long checkout lines due to slow transaction processing.

For network support staff, their hardware stacks were cumbersome and required frequent on-site troubleshooting. MPLS outages meant technicians had to be dispatched to physically set up LTE modems and restore connectivity — often resulting in customers abandoning their shopping carts. The company's network infrastructure was costing them too much money and revenue, and they needed a better system.

The retailer began shopping for a network solution that could meet requirements like:

- Boost processing and transaction speeds for more responsive experiences
- Consolidate functions onto a single device for decreased CAPEX
- Provide in-depth remote management for lower OPEX
- Become fail-safe by using network connectivity failover

One of the most important requirements was to implement network failover that could keep their business running, even during outages.

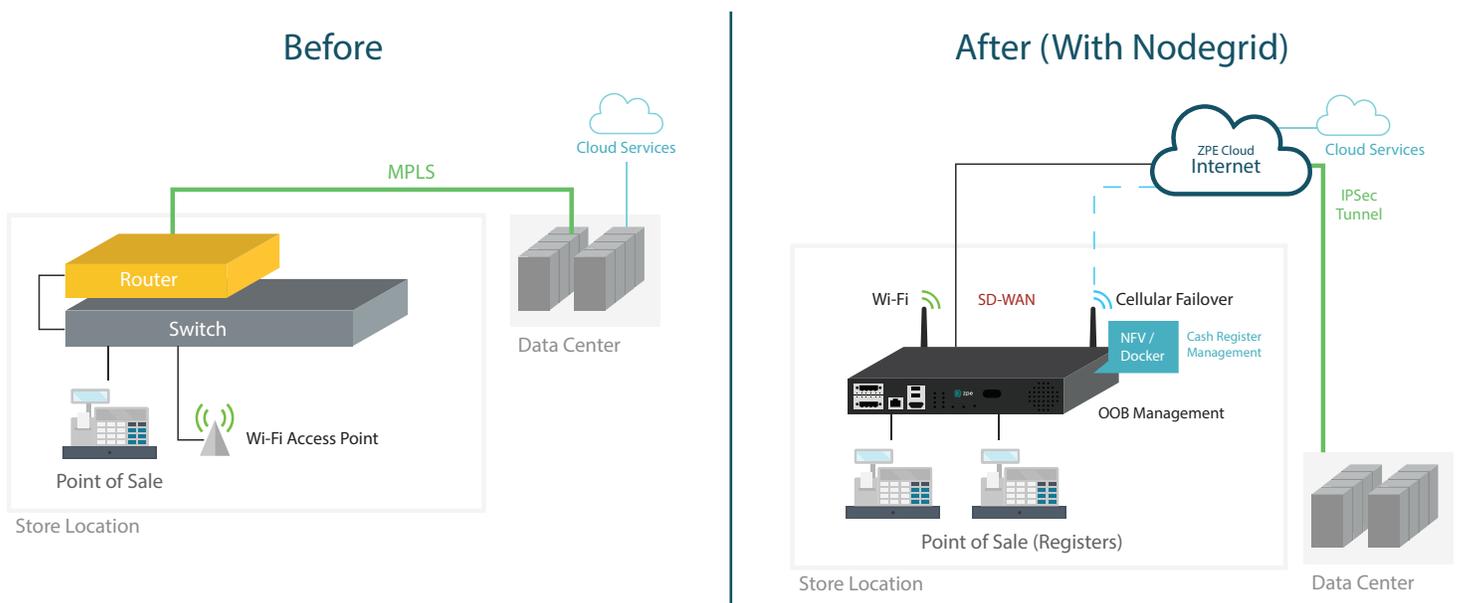
The Solution

The company implemented the Nodegrid Gate SR. This device provided powerful internal components that delivered all the capabilities they needed.

On the Gate SR, the company deployed a virtualized network function (VNF) that could cache data and boost transaction speeds. Additionally, the multi-core Intel® CPU and Nodegrid OS allowed them to consolidate other functions onto the Gate SR, including firewall, routing, Wi-Fi, switching, out-of-band management, and Quality of Service (QoS) settings.

The Gate SR also provided critical network failover via 4G/5G/LTE backup with two dual-SIM slots for carrier redundancy. This allowed the company to select four different cellular providers of their choice and get the ultimate in redundancy.

The built-in Nodegrid OS gave the retailer remote management capabilities, along with vendor-neutral extensibility to support future requirements. ZPE Cloud was also deployed for remote IT management.



The Results

The retailer's new configuration led to drastic changes and allowed them to quickly achieve their business goals.

They were able to consolidate many functions onto a single box. Instead of using separate hardware for routing, switching, and LTE, the company needed only one device. The Gate SR also eliminated the need for MPLS lines, and accommodated broadband connectivity over WAN.

This level of consolidation, coupled with VNFs and remote management, laid the groundwork for a more reliable system that staff and customers could count on. For business, this solution would prove invaluable to fulfilling their requirements and bringing forth significant benefits.

With Nodegrid, operations became more responsive and customer experiences became smoother. The company was no longer held back by slow MPLS lines, and outages no longer threatened prolonged downtime or major losses. The Gate SR brought benefits like:

- Efficient, responsive experiences staff & customers demand
- Reduced CAPEX due to virtualization & a reduced stack
- Lower OPEX thanks to cellular failover & remote management

The retailer's distributed network was no longer plagued by latency. Access to their cloud application was optimized and no longer required going through the data center. Fast broadband connectivity and reliable cellular backup also meant product availability could be shown in real time. Stores could manage inventories accordingly, while customers benefited from streamlined shopping and instant transaction processing.

The Gate SR also helped to reduce capital expenses. The company no longer had to manage and maintain many purpose-built appliances at each location. A single Nodegrid device took the place of switches, routers, and LTE modems, and also eliminated the need for costly MPLS connections. This consolidated stack simplified the networking infrastructure to save energy, rackspace, money, and improved uptime and service availability.

As for operating costs, the Gate SR helped the company save across the board. Using broadband over WAN and two dual-SIM cellular slots, the retailer's locations no longer came with a single point of failure as they had when using only MPLS lines. If their broadband connection failed, the Gate SR would automatically switch to one of four 4G/LTE providers of their choice. Customers could continue shopping and purchasing, even through main line outages.

When disruptions occurred, IT teams could respond without having to dispatch on-site support. This is because Nodegrid provides remote out-of-band management right out of the box, which is also supported via cellular connection. Through ZPE Cloud, the company's staff gained the ability to instantly address issues with their systems, whether they were across town or across the continent.

Nodegrid came together to consolidate networking and save money for this retailer. No matter what industry you're in, you can achieve the same benefits by implementing a more streamlined solution.

Call or visit our website to experience Nodegrid in action, and explore savings you never thought were possible.