



UTILIZING SD-WAN IN RESTAURANT HOSPITALITY TO ELEVATE THE CUSTOMER EXPERIENCE



INDUSTRY

HOSPITALITY / FOOD SERVICE

HEADQUARTERS

SALT LAKE CITY, UT

CHALLENGES

- Required high amounts of bandwidth to support an omnichannel experience
- Traditional phone system configuration was not standardized or centrally managed
- Network outages caused downtime for restaurant Point of Sale transactions

RESULTS

- Increased bandwidth by 25X
- Future savings of over \$200,000 per year on communications costs by moving from a traditional phone system to a VoIP-based platform
- Reduced initial Capital Expenses for new restaurants by almost \$10,000
- Fast migration of existing restaurants and deployment of new locations to new network design

Delivering a truly omnichannel presence to its customers and meeting an annual growth initiative of 20% YOY, Café Rio used SD-WAN to meet all its corporate goals.

Problem Situation

Café Rio started out as a small restaurant serving authentic dishes and quickly grew to six restaurants. Since, 2004, this restaurant chain has grown to nearly 115 stores and expanded to numerous states. As the chain grew in popularity and actual year-over-year growth exceeding 20%, Café Rio knew it needed to raise the customer service bar to continue its high growth expectations. Introducing a complete omnichannel experience in each restaurant would help it reach its goals. This included the enablement of ordering through their mobile app and online ordering website, fast and easy in-store kiosks for self-ordering, line buster tablets for queue management, and guest WiFi.

In an effort to introduce efficiencies into day-to-day restaurant practices, Café Rio equipped each restaurant with new technology and equipment. This included providing managers with tablets so that they could access reports or send emails from any location on the premises as well as have interested applicants apply for open positions in real-time. New Voice Over IP phone systems were introduced to reduce costs and provide efficient management for the IT department. Network connectivity was also used to onboard and train new employees, answer incoming emails from customers or management, and look up standard corporate recipes by line chefs.

The problem became that the legacy network infrastructure could not support the high levels of bandwidth required to make the omnichannel vision a reality. The network needed to be available and online at all times. Increasingly, customers were placing orders online or via the mobile app and if the network was down, orders couldn't be placed, causing lost sales and unhappy customers who were unlikely to return. Additionally, customers could phone in their orders, speaking directly to Café Rio employees. The new VOIP phone system was not optimized for quality of service (QoS), so echoes or lag were a common occurrence. With two second delays in voice delivery, customers and employees would begin to talk over each other, causing frustration with both parties.

Café Rio began to rethink its network and what would be needed to evolve it into a platform that could support the new corporate vision. Instead of increasing the IT staff and buying more expensive bandwidth that still experienced delivery delays from its existing providers, it sought to transform the network to create efficiencies.

“At Café Rio, we strive to deliver an exceptional user experience to our customers which means having seamless access to all available ordering channels through which our guests want to interact with us. Using VeloCloud SD-WAN, we can easily achieve those goals.”

KEVIN MASTERSON
VP OF INFORMATION TECHNOLOGY, CAFÉ RIO

Café Rio scoping requirements for a completely new network environment included:

- Clean connectivity to ensure high QoS for all communications
- Increased bandwidth that could support all network traffic, including credit card processing and app availability
- Simplified and efficient restaurant deployments
- Central management of deployed devices
- Support for two internet connections at each restaurant while optimizing and load balancing traffic across the aggregate links
- Ensure network can support future corporate strategies and initiatives

Solution Selection and Implementation: Café Rio and VMware NSX SD-WAN by VeloCloud

Following extensive research into various network options, Café Rio decided that software defined WAN (SD-WAN) would provide the network capabilities it was looking to implement. After careful evaluation of numerous SD-WAN vendors, Café Rio chose VMware NSX® SD-WAN by VeloCloud™.

Café Rio leveraged the entire NSX SD-WAN platform, including access to the NSX SD-WAN Orchestrator for centralized management and control, NSX SD-WAN Gateways for comprehensive connections and cloud application access, and an NSX SD-WAN Edge at each restaurant location.

The IT team at Café Rio specifically appreciated that each of NSX SD-WAN's Internet connections were active-active rather than acting as an active-passive failover, like many of its competitors. This allowed traffic to be constantly optimized across both lines, reduce a lag in time in case a failover was to occur, prevented VOIP call from being dropped when a single connection outage occurred, and gave Café Rio greater flexibility and bandwidth for all network traffic.

After a successful pilot in three restaurants near its headquarters in Utah, Café Rio began a phased roll-out of NSX SD-WAN across the rest of its restaurant locations.

Phased Roll-out

Café Rio's NSX SD-WAN roll-out strategy began with high volume restaurants. Because these restaurants not only did a lot of business in-store, hosting many wifi-using customers, but they also utilized many of the functions of the omnichannel experience, requiring high levels of bandwidth and QoS. Each restaurant was completely overhauled from a network perspective. All firewalls, switches, routers, and hardware was replaced with NSX SD-WAN. Following the roll-out, Café Rio experienced a 25X increase in the amount of available bandwidth.

“When one hears the words ‘network overhaul,’ you cringe because it’s difficult to plan and resource intensive to implement. But with VeloCloud SD-WAN, we were able to transform the entire network and shrink our hardware footprint. As a result we have become agile, responsive, and fully capable of delivering on our future growth strategies.”

KEVIN MASTERSON
VP OF INFORMATION TECHNOLOGY, CAFÉ RIO

Migration from Legacy to New Network with OTT and Replace

NSX SD-WAN offers a seamless network deployment as it does not require any “rip” of equipment before “replacing” it with its own technology. This was very attractive to Café Rio as being offline for any length of time can be detrimental to its business.

Café Rio simply deployed NSX SD-WAN over the top of its existing legacy network infrastructure. Once it was determined that all functions were running smoothly (such as routing functionality, VoIP traffic and QoS delivery, and security), technicians simply had to move one single cable from the legacy hardware stack to the new NSX SD-WAN Edge. Failover was instantaneous with no downtime at all to the network. This shift could be performed in the middle of the day, during high-traffic times, and was completely transparent to both customers and employees.

New Restaurant Location Deployments

Deployment of technology to new restaurant locations used to be cumbersome and had a long lead time. Contractors would need to manually configure each piece of hardware on-site, test connections, and then manage independently of any other nodes on the network. If changes needed to be made to the hardware, it required that a technician arrive on site to make the changes.

With NSX SD-WAN, new locations are easy to set up, requiring only two Internet connections and a NSX SD-WAN Edge. Because it is simple to use and deploy, trained technicians are not required. All configurations were performed at the central headquarters and then shipped to the restaurant location. Once plugged in, the NSX SD-WAN Edge would automatically connect to the NSX SD-WAN Orchestrator. Thereafter, if troubleshooting, maintenance, or configuration changes needed to be made, they would be performed at the NSX SD-WAN Orchestrator level, located at the main IT office, which would then propagate to the relevant NSX SD-WAN Edges on the customer-premises.

Secure PCI Traffic

Café Rio relies heavily on credit card transactions, both performed in-store at a POS, via the mobile app, or on a computer browser. To ensure that credit card transactions are prioritized over other traffic as well as kept secure, Café Rio segments this traffic from other network traffic such as customer WiFi. This is critically important as the data must be encrypted and safely transmitted to the processing provider, maintaining PCI DSS compliance at all times. Using NSX SD-WAN, Café Rio is able to ensure the validity, security, and compliance of the credit card transaction over its network.

Network-wide IP Phone System

Café Rio customers don't just rely on mobile apps and browsers to place their food orders. Phone-in orders are also extremely popular. Dropped calls, latency, and jitter were common problems leading to frustrated customers and employees.

Aligning with its network transformation initiatives, Café Rio decided to move away from its reliance on legacy T1 lines, and shifted to Internet connections such as broadband cable and DSL lines. But Café Rio's network then lacked the necessary standard levels of QoS to support their new VOIP phone systems. It migrated all existing restaurants to the new platform, routing traffic through NSX SD-WAN, which load balanced all traffic in and out of each location and cleaned up the network connectivity's quality to provide clear sounding VOIP calls. With this new platform, Café Rio will be able to save an average of \$200 per month per location on communication costs, over \$264,000 per year in total across all sites when fully implemented. Additionally, it was able to avoid a \$10,000 purchase of a traditional PBX phone system for each new restaurant location.