

Retailer Redesigns Data Center to Get Closer to Customers

Customer Case Study



National food chain builds data center infrastructure optimized for new service using Cisco solutions and services.

EXECUTIVE SUMMARY

Customer Name: National food retailer

Number of Employees: 180,000

Challenge:

- Create environment that facilitates future web services and enhances current ones
- Provide roadmap for new and improved services
- Perform data center upgrade in less than two months

Solution:

- Cisco Services reviews and validates design for new data center
- Cisco Nexus switches bring scalability and 10GigE connectivity
- Cisco Data Center Optimization Services helps ensure optimal data center performance

Results:

- Performed data center upgrade in record time to meet new program launch
- Increased agility and allowed infrastructure to scale for enterprisewide deployment
- Helped ensure consistent methodology and simplified management with industry best practices

Challenge

This Cisco customer oversees one of the largest supermarket chains in North America. Yet despite its dominant position and long history, the company is constantly searching for new and better ways to reach customers so that it can remain competitive in the food retail sector. Not surprisingly, the grocery giant's website is expected to play a key role in this effort.

The food retailer soon realized, however, that its legacy data center was ill-equipped for the task. Consisting of a multivendor environment assembled organically over a 15-year period on a project-by-project basis, the data center simply could not scale to meet the needs of its new website, including a targeted marketing program already scheduled for launch. This Cisco customer needed an infrastructure that could provide immediate support for the program but also be extended throughout the enterprise over time. Most importantly, it needed that infrastructure to employ a consistent methodology so that it could flex to accommodate unexpected requirements and evolve with the business.

With a seven-week deadline for project completion, the company's director of voice and data network quickly collected his colleagues' input to come up with a list of the food chain's most commonly requested services. These services became the components of the primary apps group, which was then mapped to the new architecture.

Although this Cisco customer had worked with a partner to develop a design for the new data center, limited time existed to test the architecture. The primary apps group knew that to mitigate implementation risk, they would need an expert to validate the solution before the program's official launch.



“We accomplished in two months something it normally takes at least a half-year to complete... Cisco helped in making that possible.”

Director, Voice and Data Network
National Food Retailer

Solution

With Cisco products sitting at the core of the new multivendor environment and the food retailer's positive experience engaging Cisco® Network Optimization Services, as well as Cisco High-Touch Operations Management (HTOM) Services, the director of voice and data network turned to Cisco for assistance.

Expanding the company's already successful relationship with Cisco, the team worked with Cisco planning, design, and implementation services, in conjunction with a Cisco Gold Partner, to validate the new architecture. This environment incorporated the Cisco Nexus® family of switches (including the 7000 Series, the 5000 Series, and the 2000 Series Fabric Extenders), in addition to Cisco Catalyst® 6509 Switches. “We chose the Cisco Nexus switches primarily for its scalability, port density, and 10gigE connectivity,” says a network architect at the food retailer. The new data center would include components from a variety of vendors, including Citrix, Hewlett-Packard, Imperva, DataComm, Net Optics, and Check Point.

First testing the new architecture, then implementing and optimizing it, Cisco Data Center Optimization Services was able to reassure the food retailer that its new architecture would deliver everything that it was designed to do. The director of voice and data network says, “When you're running rather than walking, as we were in trying to get the revamped data center up in time for the new marketing campaign, you don't have time to do lab testing or proof of concept. We needed another pair of eyes to check our work and to ensure industry best practices. Cisco Services provided that.” Cisco worked with the food retailer to develop a Cisco Nexus training curriculum for its multivendor environment. And it did all this within the project's seven-week time frame.

The resulting four-pod network (which includes two interfaces: one for customer-facing applications and one for back-end applications, plus two exact replicas that serve as test environments) employs Cisco Nexus 7000 Series Switches as the common core between pods. It also uses the 7000 Series switches on the individual cores to provide the distribution layer that connects services such as firewalls and load balancers. Cisco Services also made sure to propose redundancy at every point from the access layer to the common core to help ensure zero down time for the new infrastructure.

Results

With help from design and integration partners, the food retailer completed a data center update process that focused on consolidation and providing a consistent customer experience. The resulting network infrastructure is agile, scalable, available, and more than equal to the task of providing hosting services for the company's new application. Today, this Cisco customer has a data center infrastructure that allows it to act both tactically and strategically, meeting the short-term needs of specific marketing campaigns while providing the extensibility required to fulfill long-term objectives.

For the network architect, the most striking benefit of the new architecture has been the flexibility that it provides. “We've gotten many requests to add to and extend the environment,” he says, “and it's been flexible enough to accommodate all of them. We're delivering 10-gig connectivity to systems that weren't able to get services before.”

For the national food retailer, this improvement in the network translates to a significant competitive advantage. “Our new application has helped us get much closer to our customers,” says the director of voice and data network. “And there’s no doubt that confers a competitive advantage.”

He still shakes his head over the “seemingly impossible feat” that the company was able to achieve with its data center refresh project. “We accomplished in two months something it normally takes at least a half-year to complete,” he says. “With Cisco Services at our side, we had complete confidence that we’d be able to execute on our plan. We told our partners we would be ready, and we were. Cisco helped in making that possible.”

Next Steps

The food retailer continues to optimize its data center, expanding its design as the network grows while helping ensure that best practices are followed every step of the way. “Working with Cisco Data Center Optimization Services has prepared us for the continued growth and enhancement of our data center,” says the director of voice and data network.

For the company’s IT team, the process has answered a persistent question: namely, how do you build a network infrastructure that applies a consistent methodology, executes quickly, and can scale to meet changing requirements without sacrificing sustainability and commonality for a disorganized mix of solutions? The answer: with the help of Cisco products and services.

For More Information

- To learn more about Cisco Data Center Services, visit: www.cisco.com/dcservices.
- To learn more about Cisco Unified Data Center, visit: www.cisco.com/go/unifieddatacenter.

Solution List

Data Center Solutions

- Cisco Nexus 7000, 5000, 2000 Series Switches
- Cisco Catalyst 6509 Switch

Services List

Cisco Services

- Cisco Planning, Design, Implementation Services
- Cisco Network Optimization Services
- Cisco Data Center Optimization Services
- Cisco High-Touch Operations Management Services



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