

## Fitness Club Reduced Costs, Improved Application Performance

This fitness club chain centralized its resources in its data center and adopted a Cisco Lean Retail Architecture.

| EXECUTIVE SUMMARY   |
|---|
| <b>FITNESS CLUB CHAIN</b> <ul style="list-style-type: none"> <li>• 170 club locations throughout the U.S.</li> <li>• 2600 employees</li> </ul>  |
| <b>BUSINESS CHALLENGE</b> <ul style="list-style-type: none"> <li>• Reduce operating expenses by centralizing applications, servers, and IT staff</li> <li>• Avoid slow applications and unreliable connections by accelerating delivery of services and applications</li> <li>• Enhance communications by adopting unified communications solutions</li> <li>•</li> </ul>               |
| <b>NETWORK SOLUTION</b> <ul style="list-style-type: none"> <li>• Cisco Lean Retail Architecture</li> </ul>  |
| <b>BUSINESS RESULTS</b> <ul style="list-style-type: none"> <li>• Reduced costs through consolidation of servers and applications</li> <li>• Achieved 40 percent reduction in bandwidth consumption with application acceleration, content control, and data compression</li> <li>• Enjoyed more efficient communications through unified communications solutions</li> <li>•</li> </ul> |

### Business Challenge

Since its founding in the early 1970s, this fitness club chain has expanded from nine locations in New York City to become the third largest fitness club in the United States. A long-time Cisco customer, the company became an early proponent of centralizing computing and network resources to reduce operating expenses and more efficiently and securely manage the technology infrastructure.

The club needed technology solutions that could provide a small footprint in club locations while accessing converged voice and data services, unified communications, and key business applications securely. Additionally, IT executives were looking for a more cost-effective WAN solution due to the high cost and bandwidth limitations of their existing Frame Relay service.

### Network Solution

Becoming one of the first Cisco customers to adopt the Cisco® Lean Retail Architecture, in 2006, the company removed the application servers in each club location and consolidated them in the New York data center. Cisco 2600 Series Integrated Services Routers (ISRs) were deployed in each location (and more recently upgraded to the 2800 series) alongside Cisco

Catalyst® 1900 Series switches (recently upgraded to 3560s). Today all applications (e.g., email, membership, calendaring, and point-of-sale) are run over the web. Nearly 75 percent of club locations had been upgraded to access applications remotely.

“Most retail customers are interested in moving servers to the data center, but they are not ready to move point-of-sale servers [POS] out of the stores,” says the Cisco account manager. “This fitness club chain has a fairly low volume of credit card transactions in their clubs, so they additionally centralized their POS servers in the data center for even more efficiency and cost effectiveness.”

The Cisco AVS 3100 Series Application Velocity System was also deployed to significantly lower the cost of web application deployments by accelerating performance and optimizing server and

network resources. This acceleration is accomplished by reducing the latency and bandwidth required for any given web application. Optimization is achieved by off-loading tasks from the server, such as secure socket layer (SSL) encryption and decryption, compression processing, and redundant request from the server. Content load-balancing was also upgraded with the deployment of the Cisco Application Control Engine (ACE), which provides greater application control, better performance, and heightened security at the data center. Using Cisco ACE, the company can more easily and quickly deploy and migrate applications and increase application throughput without compromising network availability.

The company also embraced voice over IP (VoIP) and unified communications in 2007, deploying a Cisco Unified Communications Manager at the data center and a Cisco Unified Contact Center Express, both serving employees at all the clubs where Cisco IP Phones have been installed. Each employee now has access to the full spectrum of unified communications features. Members and other callers are routed to the appropriate staff via direct extension dialing or via transfers by the centralized contact center agents. A WLAN has additionally been deployed in the corporate New York City headquarters office using Cisco access points and controllers.

The core network includes Cisco Catalyst 6500 Series switches, and there are Cisco Catalyst 4500 Series switches in the distribution layer. Cisco MDS 9200 Series multilayer switches provide a fast, efficient, Fibre Channel storage area network (SAN) solution in the data center, and it is replicated at a disaster recovery site.

## Business Results

By moving to a centralized, Cisco Lean Retail Architecture with applications delivered securely over the web, this fitness club chain has significantly reduced the time necessary to deploy new applications, improved application performance, reduced provisioning timeframes, and saved on capital and operating costs by having less gear to install and manage. Central call processing via

unified communications solutions from Cisco eliminates the complexity and costs of administering separate phone systems at the clubs. Centralized server and data storage has simplified management, reduced power consumption, and made the platform more responsive to business initiatives.

Another enhancement to this fitness club chain's network that is under way is the migration from the company's Frame Relay WAN service to Verizon Multiprotocol Label Switching (MPLS) service, which is more cost effective and able to deliver more bandwidth for more bandwidth-intensive applications such as video. This fitness club chain's management

is also looking into deploying digital signage where club event or class calendars and targeted advertising could be displayed as well as video for training. With the Verizon MPLS service, service level agreements and quality of service guarantees would enable the delivery of voice and video dependably.

| PRODUCT LIST   |  |
|--|--|
| <b>Routing and Switching</b>                           |  |
| • Cisco 2800 Series Integrated Services Routers (ISRs) |  |
| • Cisco Catalyst 6500, 4500, and 3760 Series switches  |  |
| • Cisco Application Control Engine (ACE)               |  |
| • Cisco AVS 3100 Series Application Velocity System    |  |
| <b>Unified Communications and VoIP</b>                 |  |
| • Cisco Unified Communications Manager                 |  |
| • Cisco Unified Contact Center Express                 |  |
| • Cisco IP Phones                                      |  |
| <b>Storage</b>   |  |
| • Cisco MDS 9200 Series Multilayer SAN switch          |  |

## For More Information

To find out more about Cisco Solutions for Retail, go to:

<https://www.cisco.com/web/strategy/retail/index.html>



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