



Manufacturer Reaps the Benefits of Data Center Consolidation

Consolidation streamlines operations and leads to \$50,000 in monthly savings.

Executive Overview

Client:

Our client is a leading tire and rubber-related products developer and manufacturer. From commercial automobile and aircraft tires, to building and industrial materials, they develop and distribute rubber and tire products to more than 150 countries around the world.

Our client is an American subsidiary of one of the largest rubber and tire companies in the world. With more than 50,000 employees, they have been serving the automotive market across the globe for nearly a century. With five data centers across the US, they struggled with redundant and underutilized infrastructure, inconsistent IT service delivery, and IT staff working from different processes and procedures at each site.

They partnered with David-Kenneth Group on a large-scale project with the goal of consolidating their four data centers and moving operations to an enterprise data center. In addition to

Business Objectives:

- Reduce total cost of ownership.
- Gain operational efficiencies.
- Improve availability, performance, and flexibility of IT services.

Industry:

Tire and rubber-related products
and services

Region:

Americas

Project Goals:

- Reduce data center portfolio from five data centers to one.
- Achieve near 100% consolidation of IT servers and systems.
- Execute the project with zero disruptions to business operations.
- Execute the project in conjunction with modernization efforts at enterprise data center.

consolidation, they needed to reduce their infrastructure footprint, modernize infrastructure, merge services, streamline IT services, and create a consolidated support model for IT staff.

On a tight project time line, our team was tasked with identifying operational inefficiencies, developing a strategy for improving data center performance, consolidating four data centers, and migrating to a fifth data center that was undergoing a major renovation.

Before Data Center Consolidation

Our client's data centers stretched from the southern United States to the Midwest. Each of the five data centers operated independently and had their own process, procedures, and methods of operating. Knowledge about applications, devices, and servers was limited to a handful of IT staff at each site, causing an information gap that negatively impacted operations. In many cases, the information was either not properly documented or not documented at all, further compounding the information gap.

Additionally, they were spending an exorbitant amount of money powering and cooling physical devices, many of them redundant or unneeded. Without a clear understanding of what physical inventory was critical to IT service delivery, our client also spent an excess amount of its operating budget on unnecessary assets.

Operational inefficiencies, combined with high operating costs and poor data center performance, limited their ability to remain competitive. They needed to significantly reduce their infrastructure footprint and modernize to reduce their total cost of ownership and to improve the availability, performance, and flexibility of IT services.

"The consolidation project was successfully executed more than two months ahead of schedule, more than \$13,000 under budget, and with zero downtime to the source and enterprise data centers."

The Consolidation Project

Critical goals of the consolidation project were to reduce waste by eliminating redundant infrastructure and to execute the project without disrupting business operations. To do so, our team needed a 360-view of all assets and dependencies. We began by monitoring their operating environments in real-time using an auto-discovery tool.

Next, we executed a manual discovery effort, conducting onsite inventories and gathering human intelligence about their operating environment that was non-discoverable by machines. Together, auto-discovery and manual discovery provided insights into system and application dependencies while updating their CMDB.

The rigorous discovery effort informed critical decisions that affected both business and project objectives. It also helped to mitigate risks during migrations and identify cost-saving opportunities.

The consolidation and standardization of systems across data centers and platforms reduces the total effort to provision IT services and the required breadth of skills. By consolidating the server population, our client would gain higher levels of density, reduced licensure costs, and reduced cooling and power consumption. Server consolidation also enabled our team to minimize risk during migrations and improve the chance of success.

Executing the migration during a major modernization project at the enterprise data center required tightly coordinated migration time lines. Our team worked with our client's project manager to schedule migrations around space, cooling, and power availability at the enterprise data center.

“Overall, we reduced our client’s physical infrastructure footprint by 88 percent, migrating 398 devices and decommissioning more than 1,000.”

The consolidation and migration project was successfully executed more than two months ahead of schedule, more than \$13,000 under budget, and with zero downtime to the source and enterprise data centers.

Results After Consolidation

All four source data centers were migrated into the enterprise data center through both virtual and physical migrations. Thousands of physical devices were either migrated, consolidated, or retired, eliminating waste from redundant and underutilized infrastructure. By upgrading their facilities, we reduced the number of universal power supplies needed to power the data centers, resulting in a significant reduction in power and cooling costs.

Consolidated IT staff were successfully integrated into the newly modernized enterprise data center and now work from an updated CMDB with clean data. With newly documented processes, procedures, and support requirements for applications, knowledge-sharing improved among IT staff and resulted in faster IT service delivery. Other project results included:

Achieved 100 percent consolidation

Consolidation led to the elimination of redundant, unused, and nonoperational infrastructure. Overall, we reduced our client’s physical infrastructure footprint by 88 percent at the four consolidated data centers, migrating 398 devices and decommissioning more than 1,000.

Reduced total cost of ownership

Consolidating 5,400 square feet of data center space led to \$110,000 in monthly savings. Power and cooling costs were reduced by 89 percent and resulted in more than \$50,000 in

monthly savings.

Improved operational efficiencies

With a newly consolidated support model at the enterprise data center, our client improved operational efficiencies while also reducing the amount of IT staff required to operate its enterprise data center. This resulted in both cost savings and improved processes, procedures, and knowledge-sharing.

Summary

Our client now serves its employees and customers with an IT infrastructure designed for efficiency, agility, and speed. With a celebrated history of delivering products to customers around the globe, our client is positioned to remain at the top of its industry now and in the future.

