



# Global Security Company Consolidates Data Centers

## Client:

Our client is a provider of systems, products, and solutions for aerospace, electronics, information systems, and technical services. Their vast global reach extends to government and commercial customers in 25 nations, addressing emerging global security concerns.

## Executive Overview

This client began looking to optimize their data center infrastructure primarily to reduce costs, facilities, and complexities; improve energy management; and optimize standards and control. After one year of effort, the internal team had made little progress with a monthly burn rate of over \$1 million. They were stuck in discovery and planning and facing a budget deficit in a matter of months. The client decided to reevaluate its approach. New leadership was appointed, and David-Kenneth Group was engaged to turn around the failing project.

## Before Data Center Migration

The challenges facing them were complex and legion. The first problem was one of scale and diversity. Their overall infrastructure environment was extremely diverse, with each of their sites supporting hundreds to thousands of servers. Several sites were

## Business Objectives:

- Reduce costs, facilities and complexities.
- Improve energy management.
- Optimize standards and control.

## Industry:

Global aerospace and defense

## Region:

North America

## Fortune Rank:

A Fortune 500 company

## Project Goals:

- Migrate nine sites in nine months.
- Recover faltering project.
- Lower monthly burn rate.
- Maintain schedule in face of layoffs.
- Reduce floor space significantly.
- Eliminate unnecessary hardware and software maintenance contracts.

operating massive custom-developed codebases; highly optimized, performance-computing clusters; and/or direct interfaces with large-scale precision manufacturing. These realities were compounded by their distribution across over 200 locations domestically, with each site possessing its own standards, processes, and common services.

The second challenge was to modernize the infrastructure, which is common among legacy organizations. With minimal virtualization to date, machines and software were operating 5-10 years beyond end of life and with an absence of documentation. The problem was growing each day as more irreplaceable hardware failed, more security vulnerabilities were discovered, and more employees retired along with their critical knowledge of these older, custom systems. The pressure to modernize and replace was mounting.

The third challenge was the significance of these systems for overall enterprise operations. These systems supported services for safety, security, flight tests, manufacturing production, and research. Each business sector was completely dependent upon their information technology infrastructures and systems to accomplish their critical missions and carry out their corporate business strategies.

These combined challenges dictated an unusually broad and holistic approach.

## The Solution

### Five Steps

David-Kenneth Group immediately reviewed program organizational structure, schedule, processes and quality. Our review suggested that unnecessary processes, and staff were clogging up progress and necessitated change.

David-Kenneth Group was able to propose and implement a streamlined set of procedures that ensured quality without undue

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bureaucracy and headcount. A team of subject matter experts was dedicated to the program, and the program schedule was recalculated with a delivery-based model that replaced a highly process-oriented schedule. Accountability to the new schedule began immediately. Remaining assets refocused their efforts on a leaner and repeatable migration methodology with greatly accelerated results.

Within one month the client had reevaluated their strategy and identified eight sites to be consolidated before the end of the year. Consequently, David-Kenneth Group had nine months to complete eight sites—an aggressive but essential schedule, considering the false start, heightened by concern from executive management about the potential loss of financial benefits. The budget was around \$6.5 million. The sites were scattered across the country from north to south and east to west.

The team began, and in less than 30 days from engagement, site #1 was migrated, equipment decommissioned, and the site closed.

### **Creativity Equals Savings**

Three months into the project, the client initiated the first of three company-wide layoffs. The potential for project delay was significant as budgets were cut and internal team members eliminated. Our site strategy had to change. Immediate savings had to be found, or project failure could become a reality.

David-Kenneth Group advised the client on various consequences and options, based on our previous experiences in the field. Still, at the end of the day, we had fewer people doing a broader range of activities than before.

David-Kenneth Group took an in-depth analysis of the standard operations cost schedule as well as the costs being incurred by the consolidation effort itself. On the operations side, we found that by tightly managing timing and priorities, the client could avoid costly six-figure renewals and maintenance fees on certain

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systems by refreshing and migrating before the existing contracts expired. On the consolidation plan, we found synergies by consolidating two nearby sites in a single effort. This avoided duplication of meetings and overhead, stretching limited headcount that much further. These two efforts alone resulted in immediate hard savings of \$225K for site modules and labor as well as \$125K in maintenance fees.

In addition to mining the details for savings, we took a look at the big picture. In one situation we identified a costly disconnect between low-level field needs and executive procurement. For a particular site, we needed to migrate a lot of data fast. The standard approach was to undergo a lengthy procurement of mobile units that cost \$90K each.

Instead, we used a simple \$1,500 NAS device for the transfer that was obtained and installed in 24-hours, saving tens of thousands in materials, labor, and paperwork otherwise incurred by the standard approach.

### **Bonus Round**

Despite the three waves of layoffs and budget cuts, David-Kenneth Group migrated eight sites in eight months. As year-end approached, we were ahead of schedule and \$1.2 million under budget—by far the best performing project in the client's entire portfolio. We had improved the pace and performance so significantly that we had money and time to spare before the year's end.

We leveraged those resources and rare downtime during the holidays to migrate a ninth site via a massive forklift move. This bonus round successfully positioned the project ahead of schedule and provided additional budgetary savings, including months of additional operational expenses for rent, floor space, hardware, and software.

### **The Results**

Despite the challenges to the project, David-Kenneth Group and

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client partnership yielded impressive results:

- Nine sites migrated in nine months.
- The monthly project burn rate was reduced by 66%.
- The project schedule was unaffected, despite three reductions in force and accompanying budgetary challenges.
- An 89.2% reduction in floor space was achieved.
- Over 700 servers were retired.
- Millions of dollars were saved in power and cooling.
- Hundreds of thousands of dollars saved in hardware and software maintenance.

## Insights

How did we accomplish more with less, ahead of schedule and under budget?

### Eliminate Risk

We eliminated risk by eliminating variables. We locked down configurations and made no upgrades during the migration. We used disaster recovery systems and documented everything. We established predefined plans of action for negative events and instituted solid testing.

### Use a Delivery-Based Model

The client was trapped in an endless cycle of discovery and fact checking, unsure about what type of data was important to collect; thus everything was important. It produced minimal results. The client also had a myriad of approvals and review tollgates that also slowed progress. We redesigned and streamlined their process by establishing a detailed deliverable-based schedule. By removing the emphasis on process, tasks were completed faster. We essentially stripped away the red tape without sacrificing accuracy or quality.

### Increase Reporting and Visibility

By increasing the details in reports, including the schedule, the runbook, and communication templates, we were able to unclutter the environment. Less time was spent communicating up the chain of command. Fewer checklists were required for processes. All of which generated more actionable results with less participation and improved credibility for the project.

### Implement a Lean, Repeatable Methodology

With sites coast to coast, each with its own processes and standards, remaining nimble was critical to the success of the project.

By using a proven methodology with processes and contingencies already in place, the client was able to avoid unnecessary effort to “reinvent the wheel” for each site. It enabled them to harvest the sites ahead of schedule without compromising quality or oversight.

*“Thank you for a great run. You and your team have a lot to be proud of. The commitment and experience you brought to the table absolutely contributed to the overall success of our program. It was a pleasure calling David-Kenneth Group our team members.”*

*- Program Director,  
EDM and Server Virtualization*

