



NASCIO 2017 State IT Recognition Awards Nomination

Data Center Expedited Move

State of Florida
Agency for State Technology

Category: State CIO Office Special Recognition

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Project Completion Date: May 2016

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Executive Summary

Prior to the State of Florida 2016 Legislative Session the Agency for State Technology (AST) was responsible for the administration of two primary data center facilities - the Northwood Shared Resource Center (NSRC or Northwood) and the Southwood Shared Resource Center (SSRC), a Tier III facility. However, in March of 2016, under a very tight timeline, AST was tasked by the Legislature to consolidate the two data centers by migrating the NSRC into the SSRC.¹ As such, AST proceeded with the arduous task of migrating Northwood into Southwood.

AST successfully relocated staff out of the Northwood facility in just seven days, and migrated the workload of the 36,000 square foot data center to the Southwood facility in just 90 days.² The equipment, hosting 12 state agency customers, included over 58 racks of equipment, miles of cables, and more than 252 electrical connections. And the move was completed with little to no disruption of services to agencies that were customers of either NSRC or SSRC.

Concept

Pursuant to the above-mentioned legislative direction AST was required to vacate the leased space in March 2016 and given only three months to plan and execute the move of staff offices and computer room operations/equipment. Planning for this move had originally been forecasted as a two-year project.

AST staff relocated their offices which included a mainframe computing environment and more than 2,050 servers, 1,000 terabytes of data, and hundreds of supporting back-up and network devices to the state-owned Southwood Shared Resource Center, now known as the State Data Center. Prior to moving, each IT asset had to be disassembled, cleaned, decontaminated, and then reassembled to prevent contamination at the Southwood facility.

While the move was occurring, it was imperative that that daily operations and processing of both data center operations not be interrupted for any of the 30+ agency customers. Even with the increase in effort associated with the move (e.g., daily and weekly communications through email, countless planning conference calls, extensive face-to-face meetings with agency stakeholders), regular workloads could not be delayed and did not decrease. Fortunately, funding for flexible employee scheduling and overtime enabled AST to meet the demands. Additionally, AST leveraged a combination of temporary and staff augmentation resources to meet the aggressive timeframe. Vendor partners also assisted in the effort.

A close-knit partnership evolved with the impacted customer agencies, which allowed both customer and data center staff to evaluate where operational and resource efficiencies could be identified and implemented. This effort also involved planning on how to limit downtime of each respective agencies' applications, and in many cases increased the velocity of planned virtualization efforts. Scheduling regular meetings and status calls, with designated, single points of contact³, was instrumental in keeping everyone on the team informed as to progress and next steps in the project schedule. Finally, in working

¹ The migration out of Northwood was originally being planned as a multi-year project to be completed no later than the 2018-19 fiscal year.

² Again, activities that were originally planned as a two-year effort

³ The ability to reach out and discuss potential issues was made easier through dedicated point people.

with the larger customer agencies, conducting daily conference calls was critical in synchronizing planning efforts.

An agile-like project methodology evolved, with constant feedback on move status provided via AST's IT Service Management tool, which also houses AST's Configuration Management Database (CMDB). This allowed for dynamic dashboards to be updated through the change control process to, in a very timely manner, display the expedited progress being made. Also, onsite evaluations were used to confirm move-related activities and address data consistency. Ultimately, the consolidation allowed for significant cost savings to be recognized; over \$2.1 million dollars were saved in salary and benefits, other personal services (OPS), and expense.

Significance

While data center consolidation in both the IT industry and state government is generally considered a best practice, the success within the extraordinarily restrictive timeframe is remarkable and certainly not the norm within the industry. For example, it took over three years to consolidate state agencies into the two primary data centers versus three months to consolidate the two primary data centers into the single State Data Center - a herculean effort and that was only successful with the dedication and commitment of all stakeholders.

The expedited staff and data center move out of the Northwood facility improved the efficiency of the organization. Merging the previously geographically separated teams has facilitated integrated operations and enables more consistent, operational maturity and a unified team. Relocated IT infrastructure also gained the benefit of now being housed in an independently certified Tier III facility, one of only three governmental agencies in the world to have achieved this level. Since Tier III facilities have many built-in facility redundancy requirements, the benefit to the citizenry is greater uptime and accessibility to agency services.

In addition, the project gave many agencies the impetus to further embrace server virtualization, as virtual servers could be moved to the new facility with much less risk and downtime. This also presented an opportunity for agencies to re-evaluate their agency's use of services and eliminate, where possible, aged hardware or underutilized services. Additional operational efficiency is expected to improve over time as the equipment that was physically moved are logically consolidated.

Impact

The most important impact of the relocation activity described herein was the impact that was NOT experienced by Northwood data center customers. The entire move was accomplished with essentially no unplanned outages and with planned outages minimized and coordinated to have the least impact on AST customers.

The consolidation allowed for some significant cost savings to be recognized - over \$2.1 million dollars were saved in expense, OPS, and salary and benefits. The break-down is as follows:

- Expenses (\$1,738,872)
- Other Personal Services (\$63,373)
- Salaries and Benefits (\$37,426) - (1) FTE
- Human Resources Services (\$339)