

Unisys

Cutting data storage costs for a government organization by 30 percent

Overview

The need

Project-based investments had left a U.S. government organization with a sprawling, costly and inflexible data storage infrastructure. How could Unisys help its client respond faster to new demands?

The solution

Unisys built a private storage cloud for its client, powered by IBM Spectrum Virtualize™. The solution virtualizes disk arrays from multiple suppliers, and introduces thin provisioning and four tiers of storage.

The benefit

Reduces data storage costs by 30 percent. Cuts cost and complexity through 4:1 infrastructure consolidation. Delivers storage to application owners 100 times faster for greater responsiveness.

Unisys is a global information technology company that solves IT and business challenges for its clients. With more than 20,000 employees around the world, its offerings include cloud and infrastructure services, application services, BPO services, and high-end server technology.

A U.S. government organization was finding it increasingly hard to fulfill its core mission as workload grew. Years of deploying disk arrays on a project-by-project basis had created a sprawling, inefficient data storage infrastructure. Each application typically had a separately managed silo of storage that could not be shared with new applications. These islands of storage were typically either bursting at the seams or significantly under-utilized—causing performance issues in the first scenario, and representing wasted investment in the second.

The costs for acquiring and operating storage systems from multiple different vendors within this environment were high and rising, and the organization recognized that its essentially unplanned approach to data storage was unsustainable.

Where storage was once an obstacle to optimization, application owners at the U.S. government organization can now flex capacity and performance up or down as needs and budgets change, as summed up by a spokesperson: “You can see the precise costs and constraints for your application, and work out how to optimize it while balancing the budget.”



Solution components

Software

- IBM Spectrum Virtualize™
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A spokesperson for the government organization comments, “The need to maintain multiple different hardware and software configurations meant that our operating costs for storage were too high. We also had islands of both under- and over-utilization: a large proportion of our investment in storage capacity was doing no useful work while in other areas we were struggling to scale our arrays to meet growing needs. Another major challenge was that we could not rapidly deploy new storage when application owners needed it.”

Introducing software-defined storage

The government organization engaged Unisys to build and run an enterprise-class private storage cloud. “Unisys understood our issues and proposed a solution to re-use our existing assets instead of ripping and replacing,” says the spokesperson. “This was appealing, as it cut both the initial and ongoing costs.”

At the heart of the Unisys solution was the introduction of a storage virtualization layer, which pools the existing capacity into a single flexible resource with standardized management for all underlying arrays.

Dave Christel, Program Manager at Unisys, says, “We proposed a solution based on IBM Spectrum Virtualize because of its unmatched software-defined storage capability. IBM came out on top in our extensive research, and the breadth of support for other vendors’ arrays was vital in enabling the re-use of existing assets.”

In the first two years of the contract, the government organization worked with Unisys and IBM to migrate 8 PB of installed capacity into the private storage cloud—physically located in the existing data centers. Thanks to thin provisioning in IBM Spectrum Virtualize, the initial landscape needed only 5 PB of installed capacity, enabling the retirement of some arrays.

“Unisys and IBM Spectrum Virtualize have given us a flexible and cost-effective storage cloud.”

—Spokesperson for large U.S. government organization

Fast, flexible, cost-effective

“We are down to 50 arrays from the initial 83, and will soon retire 17 more—saving the client a further USD100,000 a year in power and cooling,” says Christel. “Thin provisioning means better value for our client, helping to cut their total storage costs by 30 percent. Future retirements will cut the number of arrays to 25 percent of what it was—a 4:1 consolidation.”

The client pays for utilized storage only; Unisys provides daily metering. So that storage performance and cost match the changing business value of the data, IBM® Easy Tier® provides four tiers. “We can clearly see the ROI from storage, and rapidly migrate each element of each application to the most appropriate tier,” says the client spokesperson.

Unisys can provision storage from the existing pool within hours, and install new capacity 100 times faster than before. Performance is also up, with Spectrum Virtualize enabling old arrays to support new demands. Indeed, the organization just recorded the best performance in years for its primary mission, despite huge growth in data volumes. The spokesperson concludes, “Unisys and IBM Spectrum Virtualize have given us a flexible and cost-effective storage cloud, enabling us to meet new organizational demands faster and at lower cost.”

Take the next step

To learn more about IBM storage solutions, contact your IBM representative or IBM Business Partner, or visit the following website: ibm.com/storage/spectrum



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