

## SUCCESS STORY

# University maintains Alpha and saves on maintenance with Charon-AXP

### The Challenge

A private university was running their student record system on a DS25 Alpha system, and due to student information laws, they were required to maintain old records for a certain number of years. The college's IT needed a solution to keep the Alpha running and accessible, as many options they reviewed were very expensive and time intensive. The system had only had small issues over the years, such as occasional tape drive failures, but support costs were substantial, and the system administrators knew that the age of the hardware was a major risk. The university needed a way to maintain access to the Alpha system without spending a fortune.

A senior server administrator in the college's infrastructure department first encountered Stromasys at a trade show. After moving to the new student record platform, he realized that something had to be done with their Alpha environment. The Alpha hosting archived records was aging. Engineers to manage the legacy hardware were leaving the workplace, and support for the system was costing tens of thousands of dollars per year. This was a high annual cost for an archive system. When they began considering next steps for the Alpha, the server administrator decided to reach out to Stromasys. "With the users we have still accessing the archived system, we wanted to disturb the user experience as little as possible," he said. "It made no sense to retrain the users for a system we keep for legal archival purposes." With that in mind, Stromasys legacy server emulation made a lot of sense, and could achieve a total ROI within one year.

### The Solution

The Stromasys team met with the university's team, discussing the system, its environment, and their performance goals. With that information, including the understanding that the system was required for reporting and archive purposes—and was not being used in a high-end production environment—the Stromasys team recommended the Charon-AXP/DS10 solution for the university.

The migration of the OpenVMS system and application from the Alpha system to Charon® on an Intel Windows server was done onsite. Available disk space was not sufficient to hold regular image backups, so the data had to be moved directory tree by directory tree—meaning data migration was a large part of the installation process. This, though, is part of the Stromasys process: because legacy systems are being used for many varied applications and tasks, no two implementations look the same. The implementation team's approach is as customized as the system itself, as is the solution.



« *The physical Alphas were running in a cluster and using a very large SAN storage system that was only used for the Alphas. The difference between maintaining hardware support contracts for what amounted to two racks of Alpha hardware and spinning disk SAN system, compared to the entire thing running virtually on a single HPE Blade, is massive. That's not counting monthly operating expenditures for powering or cooling the 200+ drives of the SAN and the Alphas themselves.* »



In this case, in addition to a complex data migration, the Stromasys team cleaned up duplication in the proxy database, a VMS task not standard for an installation but requested by the customer. Because data was moved from a SAN to local storage, Stromasys also added VMS logicals for the changed disk names and changed physical drive names embedded in command scripts. All of these efforts, though not directly related to implementing the Charon solution, brought a better end result for the university—improving the management of their system.

## The Result

The Charon-AXP/DS10 solution was installed within a week. The senior server administrator described the on-site Stromasys engineering team as “very professional, and an expert with AlphaServers and VMS, from the lead up to the onsite engagement through to support of our environment.” The university’s team was pleased by the relative brevity of the downtime incurred by the implementation. While other options, such as software migration, would have required months of downtime and heavy resources, the server administrators lost little to no productivity. “From an end user perspective, no changes were noticed, which was what we were going for,” the administrator confirmed, describing the process of running the Alpha in its new virtual environment. It ran as it had prior to the installation, and the primary user of the system experienced no change in the way she interacted with it.

The administrator described the environmental changes, saying, “The physical Alphas were running in a cluster and using a very large SAN storage system that was only used for the Alphas. The difference between maintaining hardware support contracts for what amounted to two racks of Alpha hardware and spinning disk SAN system, compared to the entire thing running virtually on a single HPE Blade, is massive. That’s not counting monthly operating expenditures for powering or cooling the 200+ drives of the SAN and the Alphas themselves.”

Virtualizing the Alpha decreased space use enormously, from two full racks to just two blades on a single rack—more than a 97% space savings, assuming standard racks. It also allowed the university a cost-effective solution to maintain access to archived records. The initial investment in Charon (including the solution itself, start-up services, and the first year of support) totaled less than what they were paying for a single year of annual maintenance on the original hardware. This means that the total ROI was visible within a single year. Thereafter, even with Stromasys support, their annual maintenance fees dropped by about 90%, leaving no question of the great savings the infrastructure department underwent by moving to Charon-AXP.

Ultimately, legacy server emulation with Charon made it possible for the university to cost-effectively maintain their Alpha system and, in doing so, maintain access to required archive records. A smaller footprint and lower annual maintenance costs, all without any changes to the user interface, were added benefits.

## About Stromasys

Stromasys is a pioneer in enterprise-class cross-platform legacy server emulation solutions, providing modern infrastructure for legacy applications running on PDP-11, VAX, Alpha, HP 3000 and Sun SPARC hardware. Founded in 1998 and headquartered in Geneva, Switzerland with sales, engineering, and research and development offices located around the world, Stromasys has cross-platform virtualization implementations in over 70 countries to help organizations lower costs, protect their investments, improve performance, reduce risk, and provide easier maintenance.

[www.stromasys.com](http://www.stromasys.com)



« From an end user perspective, no changes were noticed, which was what we were going for. »



stromasys  
engineered solutions