SUCCESS STORY

Unplanned downtime with a customized business-critical system: How emulation was the answer

The Challenge

For over 200 years, the end user, an industrial engineering group, has designed and supplied machines, process equipment, and production lines for the world's largest industrial players. Operating with 8,400 employees, they serve various sectors such as steel, aerospace, aluminum, the automotive and manufacturing industries, as well as cement, energy, logistics, and glass.

The end user's entire global inventory system was on a customized operating system, which ran on a VAX server. The inventory system tracked the entire supply chain and was integral to operations and productivity. However, due to the system's age, Becky A., Supervisor of Production Control and Logistics, encountered several issues with the VAX and had increasing concerns about the system.

While the operating system software and applications were stable, finding parts to keep the VAX hardware running was becoming difficult. There was also an ongoing lack of support which led to issues in backing up the system. "The inventory system is obviously essential to our operations. Relying on the VAX seemed precarious and made me continually uneasy," stated Becky. The aging server also hindered the modernization of the IT infrastructure so as to take advantage of new technologies.

The Solution

Migrating their current system to a different operating system distribution, which could run on modern x86 architecture, would require major disruption and a full rewrite of their proprietary application; an unrealistic and costly option because the source code has been lost over the years. Stromasys partner, PARSEC Group, currently supports the OpenVMS environment for the end user and shared a few recommendations on how they could more efficiently mitigate their aging hardware risk of potential unplanned downtime. PARSEC suggested emulation as it allows for a "lift and shift" solution which would move the essential operating system and layered application off the risky VAX server without major changes to their applications or businesses processes. In addition, the end user would be on a path for IT modernization of the legacy application on a much safer platform and at of a time of their choosing.

Another Stromasys partner, ASA Computers, Inc., supplied the x86 hardware with embedded Charon software, efficiently furnishing the foundation of the solution. The partners worked closely with the Stromasys engineering team for the installation and configuration of the solution in the end user's environment, expertly trouble-shooting a few networking issues. In the end, PARSEC group lifted and shifted the layered-solution: their version locked operating system and application, running on the embedded Charon, modern x86 ASA server, running on top of a Linux host OS.

CHARON VAX

PARSEC Group

PARTNER PROFILE

PARSEC Group was founded in 1986 to deliver the highest level of OpenVMS training, support, consulting, and customer service with the best expertise in the industry.

Today, PARSEC Group focuses on enterprise-level operating system services, providing a wide-range of support, training, consulting & managed services for OpenVMS, Unix (including Tru64 UNIX, HP-UX, AIX, IRIX, and Oracle Solaris), all major Linux distributions (including Red Hat, CentOS, SuSE & Ubuntu) and programming languages such as Fortran, C, Pascal, and more.

Our customer base encompasses Fortune 500 corporations to entrepreneurial startups, in the US and internationally.

ASA COMPUTERS

PARTNER PROFILE

ASA Computers Inc. started in 1989 in Silicon Valley. ASA has been the leader in server products, computing and networking. Our servers help companies provide more efficient work with a higher ROI. ASA provides a vast wealth of solid experience and best practices in the areas of systems integration, engineering, and manufacturing. We maintain R&D Lab at our 100,000 sq. ft. headquarters to build, test, and stress new designs and configurations for our customers.

stromasys
legacy server emulation

The Result

Finally, with the essential operating system migrated away from the VAX, Becky found that she had a solid working system for the inventory operations. “Our storeroom employees were happy because the system’s performance increased,” stated Becky. With better performance, “getting parts to the floor is faster and assemblies have increased their productivity as well.”

Better still, Becky found that unplanned downtime was no longer a concern and she had a solid working and reliable system for the inventory operations. With modernization, she is also able to implement an efficient disaster recovery solution, which was not feasible before the migration.

About Stromasys

Stromasys is the original and leading provider of enterprise-class cross-platform virtualization solutions, including Digital VAX and Alpha, PDP-11, PA-RISC systems, and SPARC servers. The company extends the life cycle of business and mission-critical systems through virtualization, modernization, and system enhancement.

Founded in 1998 and headquartered in Geneva, Switzerland and in Boston, Massachusetts, with sales offices as well as engineering, development, and research labs located around the world, Stromasys has implemented more than 7,000 cross-platform virtualization solutions for the world’s leading companies in over 50 countries.