

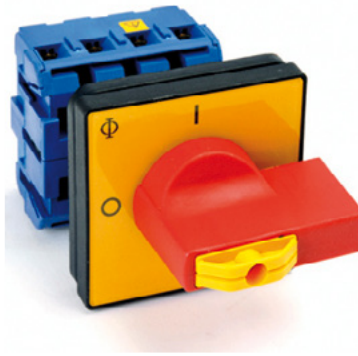
Double virtualization with Charon and VMware improves performance for Kraus & Naimer



The Challenge

With sales centers and factories distributed around the globe, Kraus & Naimer has to be able to rely on fast and reliable data processing capacity. Until a few years ago, each of the company's six plants was equipped with a VAX system dedicated to production control. Additionally, each of its 10 sales locations used a VAX system to run their ERP and financial applications. There were 17 systems in all, including several VAX 4000-200, VAX 4000-105A, and MicroVAX 3400 and 3100, as well as one VAX 6310, all of which ran the VMS 5.5.2 operating system.

"Our problem was that the systems were too old. Maintenance costs increased significantly every year. Obtaining hardware support was time-consuming and difficult, because HP couldn't always provide the necessary spare parts," said Oliver Sauter, IT manager for Kraus & Naimer. Furthermore, it was clear that the existing IT environment would soon not be able to keep up with growing demand. The problem was that the capacity of the VAX systems could not be expanded in the existing environment.



The company then decided to move to a SAP-based ERP and financial system, a transition that would take several years. In the meantime, a stable temporary solution had to be found quickly. "It was important for us to ensure the reliability of our systems for the next few years without too much effort," said Robert Signer, systems manager and developer at Kraus & Naimer. The plan was to consolidate most of the company's IT systems in its Liechtenstein data center, so as to lower administrative costs. With that objective in mind, Signer investigated virtualization solutions, and found Stromasys's CHARON-VAX.

The Solution

Signer proposed the CHARON-VAX virtualization solution as a way of ensuring the future reliability, performance, and cost effectiveness of Kraus & Naimer's IT environment. The first tests, run in the company's affiliate in France, replaced a MicroVAX system with CHARON-VAX. The virtualization was implemented without any problems and resulted in an immediate 30-fold increase in system performance.



bitco GmbH provides IT consulting for all aspects of the OpenVMS operating system. Since 2003, its consultants have helped clients implement the Charon virtualization solution for Alpha, VAX, and PDP-11 systems. bitco manages all phases of the project, from analyzing the client's current system to conducting proof-of-concept studies and implementing migration to Charon. They also provide follow-up support and maintenance. For more information, please visit:

www.bitco.at



CUSTOMER PROFILE

Kraus & Naimer is the world's leading manufacturer of electrical switches. Guided by the motto "Continually improving proven quality," Kraus & Naimer manufactures 4.3 million devices per year and employs 1,100 people. Founded in Vienna in 1907, the company now operates factories and sales affiliates in the US, South America, Europe, South Africa, Japan, Singapore, Australia, and New Zealand. For more information, please visit:

www.krausnaimer.com.





It turned out that it would have been possible to consolidate all of the company's VAX systems on one single CHARON-VAX system. Nevertheless, Sauter decided to deploy separate CHARON-VAX installations for Asia, Europe, and America. "With systems in different time zones, maintenance would have been too difficult otherwise. In addition, it would have been necessary to adapt the existing programs," explained Sauter. Within two years, all 17 VAX systems were virtualized using CHARON-VAX. The old hardware was decommissioned and replaced with three standard ESX 4.0 servers. "By using virtual VMware servers we were able to minimize the risk of outages," explained Janos Kreis, system manager at Kraus & Naimer, "while our applications continued to run on VMS."

As part of the migration, the old SCSI and DSSI disks were migrated to a SAN environment and OpenVMS was upgraded from version 5.5.2 to 7.3. Stromasys and b.it.co supported the process from planning all the way through implementation. "In case of problems, we could always rely on fast help," confirmed Signer.

The Result

All CHARON-VAX systems at Kraus & Naimer now run with perfect reliability, and business-critical applications can be used unchanged in the virtual environment. The main goal of preventing a system outage has thus been achieved. Despite the double virtualization with Charon and VMware, performance was not degraded: on the contrary, it increased significantly. "Our employees were enthusiastic about jobs that used to run eight hours now being done in ten minutes," recounted Sauter. Consolidating the IT infrastructure on a small number of ESX servers also delivered administrative and financial gains for Kraus & Naimer. "Energy costs have fallen dramatically and maintenance is a lot easier," explained Sauter.

About Stromasys

Stromasys is the original and leading provider of enterprise-class cross-platform virtualization solutions, including PDP-11, Digital VAX and Alpha, HP 3000, 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 5,000 cross-platform virtualization solutions for the world's leading companies in over 50 countries.

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