



Intel and Krikke Computer Services Inc.

Krikke Computer Services Inc. implements an Intel® Modular Server-based solution to help an engineering firm reduce IT costs, boost performance, simplify server management, and plan for growth.

CASE STUDY



"Thanks to the advantages in cost, reliability, and manageability, Liburdi is now in the process of replacing other servers with Intel Modular Server-based solutions."

John Krikke
General Manager
Krikke Computer Services Inc.

CHALLENGE

A Canadian engineering company needed to upgrade and consolidate servers at its main office. Its solution provider—Krikke Computer Services Inc. (KCSI)—considered implementing a blade and storage area network (SAN) solution based on hardware from one of the company's existing vendors. But this plan was stymied by the difficulty in finding clear configuration information for the diverse set of storage and networking components that the company needed.

SOLUTION

KCSI considered instead a solution based on Intel® Modular Server technology. Based on easier access to configuration information, pre- and post-sale support and service, and a price tag far lower than that of the original hardware vendor considered, KCSI selected and implemented a six-module Intel Modular Server-based solution for the customer.

BENEFIT

Easier access to configuration information and pre-sales support and service simplified implementation. A lower TCO enables the customer to take a longer view of its growth strategy. Reliability, performance, and manageability help the customer successfully address business challenges.

Headquartered in Burlington, Ontario, Krikke Computer Services Inc. (KCSI) has provided comprehensive business-computing and network-infrastructure solutions to small and midsize businesses since 1993. Through a workforce of just four people, KCSI offers a range of implementation, consulting, and support services, as well as hardware and software products from major manufacturers.

Business Challenge

In late 2007, KCSI was contacted by Liburdi Engineering Limited, a 200-person engineering company based in Dundas, Ontario that wanted to replace three existing servers and add new capacity to support new projects, a project that required the upgrade of its main-office server infrastructure. KCSI executives first considered designing a new solution around hardware from a blade-computer vendor whose existing server products were already installed at Liburdi and whose newer server products seemed to be a good fit. On closer inspection, however, KCSI, as well as Liburdi, began to have second thoughts.

"The more we looked at the hardware from this vendor, the greater our concern about the complexity of configuring it for the solution our customer needed," says John Krikke, general manager, KCSI.

"It was especially difficult to understand how to configure the servers for use with diverse storage and network components, because the information we needed was distributed among various departments throughout the vendor's organization."

That's when Krikke and his colleagues decided to take a look at hardware from Intel, particularly Intel® Modular Server technology, a new product offering. As Krikke explains, Liburdi had several Intel servers in place already, but was not familiar with Intel Modular Server. Based on Intel® Multi-Flex Technology, Intel Modular Server integrates computing, storage, and networking to provide small and midsize businesses a more easily configurable environment for installation, migration, and growth.

According to Krikke, both KCSI and Liburdi were impressed by the information easily accessible at the Intel Web site, particularly a drag-and-drop online configuration tool designed to vastly simplify the arrangement of modular components. "The ease of working with this online tool was a welcome contrast to the frustration we experienced when searching for configuration information from the other hardware vendor," Krikke points out. "The few times we needed to speak directly with an Intel Modular Server expert, we found it easy to locate a single point of contact at Intel for our customer's configuration questions."

For Krikke and Liburdi, another appeal of Intel Modular Server was the support available in the post-sales environment through the Intel® Advanced Warranty Replacement (AWR) program. "For this customer and others, the AWR program was a key differentiator for Intel, as was its standard three-year warranty on parts and five-year life-cycle support guarantee," Krikke says. "Knowing that Intel stands firmly behind this product made the sale much easier for us and gave the Liburdi executives peace of mind, as well."

Yet another advantage of an Intel Modular Server-based solution was the overall price tag. "Even including next-day support service the price was less than one-third that of a solution based on the other vendor's hardware," Krikke explains. "Considering this was a well-supported solution from Intel, the significant price difference really sealed the deal."

Business Solution

In mid-2008, Krikke installed an Intel Modular Server-based solution that replaced three of Liburdi's existing servers and added SAN and hardware-virtualization capabilities. The original implementation consisted primarily of one Intel® Modular Chassis with a toolless rail kit; six dual-CPU server modules, each with dual Quad-Core Intel® Xeon® processors; two additional power modules; and 14 hard drives (see sidebar for full specifications). According to Krikke, installation and configuration proceeded smoothly and rapidly, thanks largely to the extensive support offerings that helped lead KCSI and Liburdi to an Intel Modular Server solution in the first place.

"We took great advantage of white papers and technical support, but what helped the most were the ESAA [Intel® Enabled Server Acceleration Alliance] recipes," Krikke points out. "With solutions and practices based on actual customer deployments, these recipes were far more useful than the standard hardware configurations commonly promoted by vendors. Instead, they were real-world configurations including both hardware and software. Considering that Intel Modular Server technology was fairly new to us at the time, the recipes gave us a considerable head start."

Today, the Intel Modular Server solution at Liburdi encompasses six modules supporting 180 users accessing close to a dozen separate applications. They include Citrix deployed-productivity applications, customized programs for test and development, a custom MRP solution based on the Microsoft Office SharePoint Server* 2007 environment, and a number of SQL Server* 2005 databases, virtual Web servers, and others.

Benefits

Based on six months' use of the Intel Modular Server solution, KCSI and Liburdi executives are reporting solid benefits, especially in ease of implementation

and scalability. "The Intel Modular Server has been a great success from the very start," says Andrew McLean, director of finance, Liburdi Engineering Limited. "Implementation was smooth, with minimal downtime, and the solution is highly scalable thanks to its small footprint. As a result, we are well-positioned for growth from both a technical and a business standpoint."

Other factors contributing to the success of the Intel Modular Server solution are cost, reliability, and manageability. By implementing a solution with hardware priced less than one-third that of the first vendor considered, KCSI has been able to provide Liburdi with valuable headroom. "Going forward, Liburdi executives knew they would eventually want a half-dozen new modules in operation at the main office, and with the Intel Modular Server-based solution we were able to install them all at one time," Krikke explains. "As a result, they have been able to enjoy the added performance and capabilities from the very beginning, and avoid the potential disruption of a second installation."

Krikke also says that Liburdi has been pleased with the reliability of the Intel Modular Server-based solution. "For the six months since installation we've been following them closely and they've had absolutely no reliability issues," he says. Performance is improved as well. "Liburdi is running more virtual servers per module than before, and they are reporting that performance of the SAN exceeds that of the direct attached storage they used with their prior servers," Krikke adds.

In addition, Liburdi is taking advantage of the consolidated and remote management available through Intel Modular Server, which enables administration of all six servers through a single console. "They are finding consolidated management a lot easier than having to monitor each server individually," Krikke reports. "They also are using Intel Modular Server remote-management capabilities for restarts, reconfigurations, and updates."

By offering a more space-efficient server environment alongside an easier approach to management, the Intel Modular Server-based solution will also come in handy for Liburdi's future growth, Krikke adds. "Space is a big challenge in their branch offices, so having the option of expanding their Intel Modular Server-based solution helps them think very strategically about the future," he says. "Thanks to the advantages in cost, reliability, and manageability, Liburdi is now in the process of replacing other servers with Intel Modular Server-based solutions. The first phase in this ambitious undertaking is their U.S. office—a project on which KCSI has already started work."

Intel Technology

- Intel® Modular Chassis
- Toolless rail kit for Intel® Modular Server
- Multi-Core Intel® Xeon® Compute Module (6)
- Quad-Core Intel® Xeon® processor E5420 (Active or 1U Heatsink) (12)
- Kingston 2GB 667MHz DDR2 ECC Fully Buffered CL5 DIMM Single Rank, x4 (4GB for 4 servers, 8GB for 2 servers) (16)
- Seagate Savvio* 147GB 2.5 SAS drive 10K RPM (14)
- Intel power modules for support of 4-6 compute modules and redundancy (2)

Learn more about Krikke Computer Services Inc. at:
www.krikke.com

For more information on Intel® Modular Server, visit:
www.intelmodularserver.com

For more information about the Intel® Enabled Server Acceleration Alliance, visit:
www.esaa-members.com

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