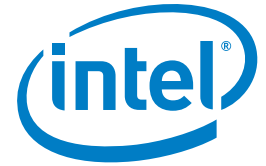


CASE STUDY

Intel® Xeon® Processor 7500 Series
Manufacturing/Retail
Technologies for Tomorrow's Cloud
Mission-Critical Computing



SAP in a Private Cloud Adds Agility for Columbia Sportswear

Outerwear innovator boosts server, storage, and network performance by virtualizing SAP on Intel® data center technologies

How can IT leaders deliver the right infrastructure for a dynamic business with shifting requirements? For Michael Leeper, senior manager of IT engineering at Columbia Sportswear, the answer is to deploy a private cloud based on Intel data center technologies. Leeper's team has virtualized over 90 percent of the company's applications on Intel® Xeon® processor-based servers, and recently migrated its enterprise resource planning (ERP) system from a legacy RISC environment to SAP ERP* 6.0 running on VCE Vblock* Infrastructure Platforms. Modular Vblock architecture uses Intel technologies in its servers, storage controllers, and networks to deliver high performance and quick deployment.



"The Intel® Xeon® processor 7500 series is the backbone of our architecture. It gives us the horsepower and memory for all the applications running on top of it. We're always looking for the latest and greatest feature set, so we will definitely take advantage of the Intel Xeon processor E7 family."

— Michael Leeper,
Senior Manager of IT Engineering,
Columbia Sportswear

CHALLENGES

- **Replace the aging ERP system.** With business requirements growing rapidly, Columbia Sportswear needs an agile, scalable, and higher-performing ERP solution.
- **Build toward the cloud.** RISC-based systems that ran the legacy ERP solution are expensive and do not provide the standardized architecture Columbia Sportswear wants for its private cloud environment.

SOLUTIONS

- **Virtualize on Intel® Xeon® processors.** Columbia Sportswear is two years into a virtualized, private cloud environment built on Intel Xeon processors and VMware vSphere* 4.0.
- **Standardize on converged, industry-standard architecture.** The VCE Vblock Infrastructure Platforms include Cisco Unified Computing System* (UCS) blade servers and EMC storage controllers based on the Intel Xeon processor 7500 series, Intel® Ethernet 10 Gigabit Server Adapters, Cisco networks, and vSphere.

IMPACT

- **Instant capacity, lower costs.** Vblock modules and the cloud's flexibility helped Leeper's team deploy the SAP solution faster than expected, scale instantly, and reduce infrastructure costs by hundreds of thousands of dollars compared to the previous RISC-based environment.
- **Better use of IT.** Leeper's physical-infrastructure management team is one-fourth its previous size, enabling more staff to contribute at a higher level.
- **Business agility.** Columbia Sportswear has the computing capacity to refine its ideas, research its breakthroughs, and put its latest innovations into consumers' hands faster.

IT Helps Turn Ideas into Marketplace Success

Michael Leeper has a clear view of his mission at Columbia Sportswear. Business units come up with creative ideas, and he provides computing resources to help turn those ideas into reality.

All signs are that he's succeeding. Columbia Sportswear has revolutionized the outdoor apparel industry by combining inspired problem-solving with advanced materials

and product engineering. The results include coats that use body heat to keep you warmer, hats that help block the sun's damaging UV rays, and boots that deliver battery-powered heat on demand. In a recent seven-month period, the company applied for more patents than in its previous 70 years combined. In 2010 Columbia Sportswear produced double-digit growth in all product categories and achieved record sales of nearly USD 1.5 billion.



A bug-repellent shirt? Intel® Xeon® processors help Columbia Sportswear make it real.

Standardize, Virtualize, and Move to the Cloud

Columbia Sportswear's move to a virtual computing environment based on Intel Xeon processors began in 2009 as part of a large project to create a disaster recovery (DR) center. "With virtualization, we were able to provide a very seamless DR strategy for the company," Leeper recalls. "Then we started to find all sorts of other advantages around performance and scalability that we weren't expecting. Virtualization allowed more of my team to work on more value-added projects, not just supporting the day-to-day operations of the company."

As IT's confidence in its virtualized environment and standards-based architecture increased, the team virtualized more and more of Columbia Sportswear's applications and workloads. The cloud was the next logical step, increasing the ease of deploying new capabilities. "The cloud and the Vblock architecture are both about the speed of deploying resources, which is what we need to do to keep up with our business units," Leeper says. "Our new solution with Vblock and the Intel processors provides us a platform to take advantage of whatever creative idea the business brings us next."

Architecting for Agility

By 2010, Leeper's team was ready to modernize the company's ERP solution. "We had installed an ERP platform from

JD Edwards on an IBM iSeries* box about 13 years ago," says Leeper. "We've grown from a private company with USD 100 million in sales to where we are today, and that ERP system was due for a change."

As the company prepared to deploy SAP, Leeper pushed for project requirements but never got them. "We had to design an architecture we could scale to meet the requirements as they evolved and take whatever the business throws at us and make it work," he says. "So we went for maximum agility and a foundation for the cloud. We looked at other solutions, and decided Vblock with the Intel Xeon processor 7500 series gives us the performance and memory we need at a cost-effective price." The SAP production system consists of 18 Cisco UCS servers with 7 TB of RAM, and Leeper says it saves hundreds of thousands of dollars on infrastructure costs compared to the previous RISC-based environment.

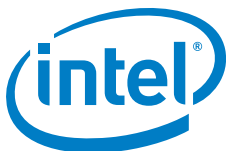
The Vblock solution's performance and modularity help Leeper's IT organization exceed business users' expectations. "By choosing the Vblock technology, we allowed the SAP project to deploy itself faster and in turn allowed the business to take advantage of that increased workflow," he says. "It has allowed us to easily grow in scale at a rate we couldn't do with some of the other products we looked at, and really simplify our environment. It's not an overly complex environment. It's just one that works."

SPOTLIGHT ON COLUMBIA SPORTSWEAR

Established in 1938 and based in Portland, Oregon, Columbia Sportswear is a publicly-traded family business that has grown into a global leader and innovator in outdoor apparel, footwear, equipment, and accessories. The company designs, develops, markets, and distributes active outdoor products under the Columbia, Sorel, Mountain Hardware, and Montrail brands.

Above all, the solution helps Leeper fulfill his mission. "My job as an IT engineer and an IT manager is to never say 'no,'" Leeper says. "I challenge my team to make sure we have a platform that can absorb whatever request comes in the door, and we've been very successful at that. Now, when I talk to my peers, a lot of them are a little bit jealous that we are able to move at a speed they will never be able to take advantage of because of their platforms."

Find a solution that is right for your organization. Contact your Intel representative or visit Intel's Business Success Stories for IT Managers at www.intel.com/itcasestudies



This document and the information given are for the convenience of Intel's customer base and are provided "AS IS" WITH NO WARRANTIES WHATSOEVER, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, AND NONINFRINGEMENT OF INTELLECTUAL PROPERTY RIGHTS. Receipt or possession of this document does not grant any license to any of the intellectual property described, displayed, or contained herein. Intel® products are not intended for use in medical, lifesaving, life-sustaining, critical control, or safety systems, or in nuclear facility applications.

Copyright © 2011, Intel Corporation. All rights reserved. Intel, the Intel logo, Intel Xeon, and Xeon inside are trademarks of Intel Corporation in the U.S. and other countries.

*Other names and brands may be claimed as the property of others.