



RISC Migration for Big Data and More

Sears Holdings gains 'extreme performance' for analytics using Apache Hadoop* software and Intel® data center technologies



SEARS HOLDINGS CORPORATION



"When you're modernizing and replacing these old, expensive, proprietary systems, moving that data and processing to Hadoop on standard Intel-based hardware gives you extreme performance. I mean 10, 20, 50, 100 times faster performance...plus substantial compression in costs."

- Scott LaCosse, IT Director, Head of Technology Operations, MetaScale, Sears Holdings Corporation

COMPANY

Sears Holdings operates more than 2,000 full-line and specialty retail stores in the United States through subsidiaries that include Sears, Kmart, and Lands' End.

CHALLENGE

To stay ahead in the fast-changing retail industry, Sears Holdings required a single view of each customer across all its stores and brands. Sears Holdings' business strategies were being challenged by costly RISC and mainframe platforms that lacked the agility, scale, and performance to effectively handle its growing requirements.

SOLUTION

Sears Holdings' IT department is three years into a strategy of migrating from RISC and mainframe systems to a private cloud based on Intel® technologies and using Apache Hadoop* software with an Intel-based cluster to transform its analytics environment. The IT organization is shifting many traditional structured databases and data warehouses onto the Hadoop cluster—either moving them entirely or offloading the transform portion of the extract-transform-load (ETL) sequence. Sears Holdings uses servers and storage controllers powered by the Intel® Xeon® processor E5 family, Intel® 10 Gigabit Ethernet Converged Network Adapters, and QLogic InfiniBand* networks, along with open-source Xen* software for virtualization and iSCSI over Ethernet for high-speed data transfers.

BENEFITS

Sears Holdings' analytics and cloud strategies provide business agility along with massive performance increases and cost savings. The company's private cloud runs more than 6,000 virtual machines, and its Hadoop environment delivers results up to 100 times faster than its legacy analytics platforms. In addition to reducing infrastructure and licensing costs, Sears Holdings is better able to deliver personalized, up-to-the minute digital experiences to its customers, deploy new solutions quickly, and adjust business strategies quickly as opportunities arise. The company has formed a new subsidiary, MetaScale, to share its expertise in data analytics and IT modernization. "Intel is a key component of everything we are doing," says Scott LaCosse, IT director and head of technology operations for MetaScale.

Find the solution that is right for your organization. Contact your Intel representative, visit Business Success Stories for IT Managers, or explore the Intel IT Center.

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