

## CASE STUDY

### Intel® Xeon® Processor 5600 Series

Retail/Manufacturing

Cloud Computing



# Modernizing the Data Center, Moving to the Cloud with Intel® Technologies

Intel® Xeon® processor 5600 series helps Chico's FAS triple its computing capacity and save hundreds of thousands of dollars annually

Chico's FAS started as a mom-and-pop folk arts supply house in 1983. Today, it's a publicly traded retailer with four brands, over 1,300 stores, and double-digit revenue growth. Steven Ross, vice president for technology at Chico's FAS, says Intel® technologies have been his bedrock throughout the company's expansion. Ross's use of the Intel® Xeon® processor 5600 series is helping his team provide the business with 3.5 times the computing capacity at one-third the energy consumption and in one-third the space of the company's older data center.



chico's FAS

"We intend to keep very current on the Intel® Xeon® processor E5 family and the technology that Intel is continuing to evolve so we can stay in the small space we have and stay as efficient as we can be as we build our cloud and provision our applications."

– Steven Ross,  
Vice President for Technology,  
Chico's FAS, Inc.

## CHALLENGES

- **Capacity.** Chico's FAS needs more server and storage capacity but wants to avoid the high costs of overbuilding.
- **Continuity.** As Chico's FAS grows, it takes a more rigorous approach to disaster recovery and business continuity.

## SOLUTIONS

- **Container-based data center.** Chico's FAS created an efficient new data center using HP Performance Optimized Datacenters\* (PODs) and the Intel® Xeon® processor 5600 series.
- **Private cloud.** The company is evolving its virtualized platforms into a private cloud with VMware vSphere ESX\* plus Intel Xeon processor 5600 series-based server and storage solutions from HP and EMC.

## TECHNOLOGY RESULTS

- **Performance.** The Intel Xeon processor 5600 series gives Chico's FAS 50 percent more performance compared to the previous generation.
- **IT efficiency.** The new data center is one-third the size of the existing one, and Ross's team deployed it in just two months. IT deploys new solutions within minutes instead of days.

## BUSINESS VALUE

- **Cost and carbon savings.** Chico's FAS reduced its data center power usage effectiveness (PUE) rating from 3.6 to 1.3. The company saves hundreds of thousands of dollars annually on utility costs.
- **A more competitive company.** Chico's FAS has plenty of headroom to run new applications and services that help the company better understand its customers, produce unique designs, and manage its increasingly sophisticated operations.

## Managing Growth with the Intel Roadmap

Dynamic growth raises the need for higher capacity and more robust contingency plans—and the stakes are even higher when your data center is located in Florida's hurricane alley. In 2011, Chico's FAS opened a new container-based data center in Barrow County, Georgia,

moving it out of prime hurricane territory and filling it with Intel Xeon processor 5600 series-based server and storage technologies. The new center provides ample headroom and ensures business continuity as the Chico's FAS IT staff manages the growing workloads caused by the company's growth through acquisitions, increased call center and



## Chico's FAS runs 42 applications on a single Intel® Xeon® processor 5600 series-based server

order entry activity, and deployment of new applications such as SAS Social Media Analytics\*, which the company is using to analyze customer comments on Facebook\* and Twitter\*.

The IT team at Chico's FAS had worked closely with Intel to make the most of its older data center and incorporate each new generation of processors. This approach helped the company expand its computing environment economically and without overbuilding.

"We saw a lot of companies overbuild on their data centers because they didn't anticipate the advances in the performance and power curve and the impact of virtualization," Ross says. "We were talking with Intel, so we understood that the future was going to bring more virtualization, higher-performing servers, and lower space requirements. When POD technology came in our viewfinder, the time was right for us to put in a new data center."

### Intel Technologies for Servers and Storage

The new center uses HP POD technology and HP ProLiant\* blades and rackmount servers powered by the Intel Xeon processor 5600 series. With data volumes growing rapidly, the Chico's FAS team deploys EMC Symmetric VMAX\* storage solutions based on the Intel Xeon processor 5600 series for its tier 1 storage needs.

The Intel Xeon processor 5600 series increases both memory capacity and memory bandwidth, giving Chico's FAS faster performance and throughput along with higher core counts. The processor also includes Intel® Intelligent Power Technology, which helps reduce Chico FAS's energy costs by automatically shifting the CPU and memory into the lowest available power state. The company has established private cloud services using Intel® Virtualization Technology (Intel® VT) to enhance performance and flexibility.

"The performance of the Intel Xeon processor 5600 series, its ability to use the memory so effectively, the intelligence it has to use the power it needs at the time it needs it—those capabilities are helping us provide maximum power and efficiency in a very small physical space and giving us the power to be very flexible as a business," Ross says. "We have one virtualized server with 42 applications on it."

Ross says the container-based data center cost him only one-third or less to create than a traditional data center, and he was able to deploy it in one-fifth the time.

These benefits, along with the performance and energy efficiency of the Intel Xeon processor 5600 series, made the new data center an easy sell to the company's executive team. "It was a no-brainer," Ross recalls. "It is very compelling from a financial perspective."

### SPOTLIGHT ON CHICO'S FAS

Headquartered in Fort Myers, Florida, Chico's FAS, Inc. is a specialty retailer of private-branded, sophisticated, casual-to-dressy clothing, lingerie and loungewear, accessories, and other non-clothing gift items for women. The company operates more than 1,327 specialty stores throughout the U.S. under the Chico's, White House | Black Market, and Soma Intimates names. Chico's FAS opened 79 stores in 2010 and 137 in 2011.

### Valued Relationship

Ross expects Intel's technology advances to help him optimize his company's private cloud and grow without adding further PODs. "We intend to keep very current on the Intel Xeon processor E5 family and the technology that Intel is continuing to evolve so we can stay in the small space we have and stay as efficient as we can be as we build our cloud and provision our applications," he says.

"In technology, it's all about the relationship, not just buying the product," Ross says in conclusion. "I consider Intel to be one of the most valuable companies we work with, if not the most valuable one. The Intel team helps us make decisions not just about processors, but about the technology field in general and a lot of the different initiatives we're working on. Intel is a bedrock in our environment."

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