

Case study

Anthony Marano Company

Chicago's Chicago's Largest Independent Food Distributor Updates their PRIMEQUEST Servers to Retain their Established Fujitsu Reliability and Availability



The challenge

In early 2007, Anthony Marano migrated their bet-the-business order processing, inventory management, email, and customer relationship applications from a competitive x86 vendor to Fujitsu PRIMEQUEST and PRIMERGY servers and ETERNUS storage. Since that time they have enjoyed unprecedented uptime and availability, and Fujitsu has become a key partner in all of their server and storage selections. However, when several of their key application vendors informed them of a shift away from Intel Itanium Processor Family (IPF) based servers, they knew they had to move from their host PRIMEQUEST 540 server, however reluctantly, because their mission-critical application support was going to expire.

The solution

Following in the foot-steps of the PRIMEQUEST 5xx family of IPF servers, the new PRIMEQUEST 1800E, based upon the Intel® Xeon® Processor 7500 Series, offered the Anthony Marano Company the same powerful and robust server platform as its predecessor, but in a more compact physical form factor with reduced power consumption. More importantly, the full x86 eco-system utilized by Anthony Marano was available on the PRIMEQUEST 1800E, assuring them of continued Fujitsu reliability and availability for years to come.

The customer

Country: United States
Industry: Food & Retail

In 1950, Anthony and Josephine Marano founded The Anthony Marano Company, a wholesale distributor of fresh produce serving Chicago and the Upper Midwest. At the helm of the company for most of his life, Marano has seen six children and a third generation of grandchildren join the company – all dedicated to a commitment of service excellence. This commitment continues through today, where sons Anton and Jody now run the growing family business.

Though rooted in family tradition, the company has eagerly embraced technology to meet the changing needs of its retail, food service, and wholesale customers. Turning vision into reality, Anthony Marano has built a state-of-the-art technology infrastructure using Fujitsu server and storage solutions that has set the company apart from its competition.



PRIMEQUEST1800E

The benefit

Migrating to the PRIMEQUEST 1800E provided Anthony Marano several positive benefits: It allowed them to continue to enjoy and expand their partnership with Fujitsu; it fully supported their eco-system and all their applications, ranging from Microsoft SQL Server and Exchange to Trend Micro security services; and it continued to provide the mission-critical reliability and availability that Anthony Marano has depended on for over four years, years in which their business has succeeded beyond their original expectations.

Real-time Inventory Management Set Anthony Marano Apart

Open seven days a week, 360 days a year, Anthony Marano had built a cutting edge facility to efficiently move more than one million cases of fresh produce in and out of the building each month. But success did not come without its challenges. The logistics surrounding the perishable agricultural commodity business are very complex. In fact, 70 to 80 percent of the 2,000 to 3,000 daily orders needed to be picked, packed, and shipped within hours. And with more than 1,400 products from around the world in the warehouse at any given time, each with varying shelf lives and storage needs, inventory management and product pricing were complicated to say the least.

To address these challenges, Anthony Marano automated its paper-based front office operations with a customized real-time inventory management application that was built using the Microsoft.NET framework, which runs on a Microsoft SQL Server 2005 database and is seamlessly integrated into the company's Microsoft Dynamics financial management software. "With a real-time view of inventory, our sales staff can be very authoritative regarding produce availability and pricing, and customer or supplier commitments," explains Chris Nowak, chief technology officer at Anthony Marano.

Up-to-the-minute access to inventory set the Anthony Marano Company apart from the competition, many of whom did not have the infrastructure to support real-time inventory control. "Real-time knowledge of our inventory helps us respond to our customers' needs faster than the competition, and boosts our reputation as a distributor our customers can count on," Nowak adds. Real-time inventory management also enabled Anthony Marano to price more effectively, a major advantage in a business where pricing varies from customer to customer depending on requirements, volume, the nature of the relationship, and market fluctuation.

Products and services

- IPRIMEQUEST 1800E
- PRIMERGY BX600
- ETERNUS4000

Giving Performance a Boost

By switching to a Fujitsu platform, Anthony Marano has also benefited from a major performance boost. Closely aligned with the Intel Itanium Processor Family (IPF), the PRIMEQUEST server family can offer new functionality and performance gains. The ETERNUS4000 SAN solution also adds to the platform's superior performance and speed. Anthony Marano boots its PRIMEQUEST server directly off the SAN, which shares disk drives across different partitions, thereby delivering great performance, even on a system reboot.

The performance increase has enabled Anthony Marano to extend its historical pricing window from two weeks worth of data to four weeks, providing sales staff with access to more data to help them make important pricing decisions. "All of our back office applications including reporting capabilities and nightly posting procedures have enjoyed a 100 percent performance improvement since switching to Fujitsu," says Nowak.

With Reliability, Availability, and Automation Comes Success

After Anthony Marano migrated to the PRIMEQUEST 540 and PRIMERGY servers, the efficiency, reliability, and performance of their tools allowed them to triple their sales volumes, growing from 2,000 to 3,000 orders per day in 2007 to over 6,000 per day in 2010. The PRIMEQUEST 540 easily grew with this success, where Anthony Marano added four more processors and associated memory resources in September of 2008. This growth was accommodated "in place", where a simple week-end upgrade allowed their .NET application accessing Microsoft SQL Server running on Windows 2003 to double in capacity. This growth spurt was accomplished with zero problems and carried them forward to the summer of 2010.

The Disappearing Itanium Eco-system

In early 2010 the Information Technology industry was rocked by two events: the debut of the Intel "Nehalem EX" processor, launched in March, and the April announcement from both Microsoft and Red Hat that they would no longer support Itanium-based systems moving forward. The Microsoft announcement alarmed The Anthony Marano Company a great deal since Microsoft applications were at the heart of their automation capabilities. Following on the heels of the Microsoft announcement, their security and virus protection vendor also dropped Itanium support and made it imperative to move from Itanium as soon as possible.

Fortunately, Anthony Marano was already aware of the new PRIMEQUEST 1800E and its capabilities. They knew prior to the Intel Nehalem EX launch that Fujitsu was going to offer an x86-based system that would support not only their entire eco-system with minimal disruption, but would also provide enhanced performance in a reduced footprint. Fujitsu had informed Anthony Marano that this new server, code-named Sirius, would supply all of the mission-critical reliability and availability of its predecessor that they had come to rely on, including self-healing memory interconnects [Anthony Marano was the only company that ran a PRIMEQUEST 5xx server in System Mirror mode] and automatic recovery from failure.

A Step-wise Upgrade

Not only was Anthony Marano going to upgrade from an Itanium-based server to an x86-based server, they were also going to update all of their operating systems and applications. "We are definitely going to do this in small steps", said Chris, "where we will first install SQL Server 2008 R2 on Windows Server 2008 R2 on the new PRIMEQUEST machine with an upgraded ETERNUS platform. Following that successful installation and test we will migrate all of our existing application data to the new PRIMEQUEST server." Part of the migration challenge was already addressed the past summer, where Anthony Marano decommissioned their PRIMEQUEST 540 server and moved the hosted applications to multiple PRIMERGY RX600 servers. "The early migration was data only," said Chris, "where we kept the same operating and database versions to simplify the move. Our hand was forced by our security vendor and we had to move off the PRIMEQUEST 540 quickly."

A Step Forward

Anthony Marano recognized early-on that migrating from the previous PRIMEQUEST generation to the next was a step forward. During multiple customer briefings dating back from the Sirius code-name, they had learned that the advanced Nehalem EX architectural features were the match of Itanium processors. Indeed, they soon found out that the new Xeon processor performance was superior to Itanium due to the Intel QPI (Quick Path Interconnect) memory interconnects and the large 24MB Last-Level-Cache shared by the eight on-die processor cores.

With up to sixteen memory slots per socket, each core could access 128GB of memory, and with the advanced QPI links providing low-latency socket-to-socket traffic, good system level performance was pretty much guaranteed.

Furthermore, Anthony Marano was satisfied with the reliability features of the new PRIMEQUEST server. Despite being the only customer in North America to configure a PRIMEQUEST 540 in System Mirror mode, Chris Nowak was satisfied with the fact that Fujitsu engineers thought QPI was the equal of System Mirror. "I am more impressed with the Intel Nehalem architecture now, if only because I know Fujitsu engineers signed off on it," said Chris after a briefing at the Fujitsu Sunnyvale facilities.

Finally, Anthony Marano was satisfied with the availability of the new PRIMEQUEST 1800E design. On their PRIMEQUEST 540 they had configured multiple XPAR partitions crossing multiple system boards to provide availability in a non-clustered environment. They did this to avoid the complexity and system management burdens of a clustering solution, acknowledging the trade-off of a brief service interruption while the PRIMEQUEST hardware recovered from an unlikely failure against the costs of a full-time clustering system. Their new PRIMEQUEST 1800E system is configured with four system boards in two partitions, so that in the event of a system board failure the system will automatically recover in 10 minutes or so, with service resuming on the remaining resources. What Chris had originally said with regards to the original PRIMEQUEST server remained true: "We would have had to hire a systems administrator to manage a clustered solution, costing the company approximately \$100,000 a year in salary and benefits," explains Nowak. "Using a hardware solution from Fujitsu, we can solve our reliability issues with excellent technology and service in a solution that is easy and cost-effective to maintain and manage."

A Family Tradition

Steeped in strong family values and tradition, Anthony Marano has been successful over the years because of its commitment to enhanced customer service and excellent operational efficiencies. With technology at the core of its business, Anthony Marano can continue to rely on its Fujitsu platform for superior system performance 24 hours a day, 360 days a year. According to Nowak "we switched to Fujitsu because no other vendor can deliver the performance and reliability our business – and customers – demand," says Nowak.

Fujitsu America, Inc. Contact

Karen Richardson
PR/Events Manager
1250 East Arques Avenue, M/S 122
Sunnyvale, CA 94085
Direct: 408-746-3300
Cell: 408-592-4663
krichardson@us.fujitsu.com

Fujitsu, the Fujitsu logo, PRIMEQUEST, PRIMERGY and ETERNUS are trademarks or registered trademarks of Fujitsu Limited in the United States and other countries. Oracle and Java are registered trademarks of Oracle and/or its affiliates. All other trademarks and product names are the property of their respective owners. The statements provided herein are for informational purposes only and may be amended or altered by Fujitsu America, Inc. notice or liability. Copyright 2011 Fujitsu America, Inc. All rights reserved.