



Case Study

Intel® Itanium® 2 Processor

Intel® Xeon® Processor

Financial Services

Server Consolidation

& Data Warehouse



First American

“The Intel® Itanium® 2 processor has shown that it can run very large, mission-critical, enterprise-wide systems, and do it very well.”

Larry Godec
CIO First American
Title Insurance Co.

Home Title & Escrow Improvement

First American Saves \$50M Annually with Intel® Itanium® 2-based Solution

First American Title Insurance Company manages more than 25 percent of the title insurance business in the U.S. and helps millions of people every year fulfill the dream of home ownership.

Technology plays a crucial role. “We view ourselves as a technology company,” says First American Title Insurance Company CIO Larry Godec. “Without technology, we cannot run the processes that allow us to produce our product.” First American runs its mission-critical First American Software Technology* (FAST) Transaction System and data warehouse on the Intel® Itanium® 2 processor, and uses Intel processors throughout its infrastructure for the scalability, performance and ability to power its fast-growing business.

Challenge


- **Impose order.** With extensive growth through acquisitions, First American had over 50 title and escrow systems running on a wide range of platforms. Business processes were inconsistent across the company, and critical management data had to be compiled manually, causing a 3-4 week delay in getting timely information. The unwieldy infrastructure drove operations costs up and made it difficult to deploy new services quickly.
- **Standardize and consolidate.** First American developed FAST and standardized it on Intel® Xeon® processor-based servers, to provide a consistent business platform. As business grew, the company scaled to 32-way configurations. The consolidation helped First American generate \$50 million in annual savings, but with 15,000 daily users and a red-hot real estate market, the company needed even more power.

Solutions

- **Take performance to the next level.** First American migrated FAST to the 64-bit architecture of the Intel Itanium 2 processor. The 32-way HP Integrity Superdome* server immediately boosted performance by 20 percent and cut CPU utilization in half, helping the company enhance customer satisfaction and keep pace with the dynamic real estate market.
 - **Get smart.** Building on its unified transaction system, First American created a robust data warehouse that runs on a 16-way Itanium 2-based server and gives managers next-day information for faster, more informed decisions.
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Assessing the Situation

Ask anyone who's purchased a house, and they'll tell you that after the search and negotiations comes the waiting, when title and escrow companies research the title, issue title insurance and perform the escrow services needed to close the transactions and get you the key to your new home.



The Intel® Itanium® 2 processor helps First American cut operations costs, enhance customer satisfaction and grow its business.

First American Title Insurance Company is a leader in this field, and in an effort to reduce the wait while accommodating market growth, the company has moved to a nearly paperless workflow. Its integrated transaction system and 1.7 TB database, running today on powerful 32-way HP Integrity Superdome servers based on the Intel Itanium 2 processor, are enabling First American to standardize and reengineer its work processes, accelerate its workflow and generate \$50 million in annual savings. The system is used by as many as 15,000 users daily at over 1,300 offices nationwide.

First American traces its roots to 1889, and has grown both organically and through acquiring hundreds of companies. By 1999, the company had over four dozen title and escrow systems, from server-based solutions that supported hundreds of users to stand-alone applications running on a single PC. Having such a heterogeneous environment drove up the costs of doing business and limited the company's ability to achieve economies of scale from its growth.

First American set out to remedy that situation. It undertook a three-year IT initiative, the largest in its history, to develop and standardize on a single, integrated title and escrow system. The company based its solution on the Intel® Xeon® processor and Microsoft Windows* operating system.

Spotlight: First American Title Insurance Company

- Second-largest U.S. title insurance company, approximately 27 percent market share
- Largest subsidiary of The First American Corporation
- Based in Santa Ana, California
- 2004 revenues of \$6.7 billion

Platform for Growth

With its choice of Intel® architecture, First American found an economical path to continued growth and scalability. After an initial server with eight Intel Xeon processors reached its limits, the company expanded the system to 32 processors. By 2003, as more users came online and the system maxed out, the IT organization examined RISC and open source alternatives and decided to migrate to the 64-bit microarchitecture of the Intel Itanium 2 processor.

"The 64-bit Itanium 2 architecture with Microsoft 64-bit software gave us the uplift and horsepower we needed to continue to grow the system," says Godec. "It allowed us to take advantage of our skills and expertise in the Intel and Microsoft environment and avoid the expense and time needed to rewrite the code for Java*." The team benchmarked other server solutions, and chose the HP Integrity Superdome* after a proof-of-concept at an HP Solution Center demonstrated the solution's high throughput and robustness.


The migration to the Itanium 2-based server solution delivered an immediate 20 percent improvement in online response times, enabling First American to do its work faster and more efficiently, and enhancing customer service as well as the bottom line.

Godec says the business process changes enabled by FAST Transaction System are saving the company at least \$50 million each year. "This system has also enabled us to grow more market share by centralizing the back-office production work, both in the title and the escrow areas," he observes. "Being on one system and standardizing our processes across all our offices are the critical enablers."



"In our industry, there is always more pressure to produce our products faster and cheaper. The FAST Transaction System and the Intel® Itanium® 2 processor enable us to do exactly that. They allow us to optimize our work processes and create our title products much quicker and much more seamlessly for much less money."

Larry Godec
CIO First American
Title Insurance Co.



“This is our core system to produce our product. We have close to 15,000 people banging on it over the course of the day, especially during month end, when we are inundated with closings. It is absolutely critical that the system be available. With the Itanium® 2-based solution, we have consistently exceeded our service level agreement to our users.”

Larry Godec
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Delivering the Solution

Performance was a key requirement driving the technology transition, and Godec says the Intel Itanium 2 processor's performance has been a critical enabler.

The Intel Itanium 2 processor's large address space and memory caches, supported by 64-bit versions of Microsoft Windows and SQL Server, enable First American's software to run more efficiently. For example, with direct access to as much as 512 GB of memory, the company can cache its full SQL Server project plan procedures in memory, dramatically accelerating responsiveness. The processor's EPIC* architecture executes multiple instructions in parallel, providing a further performance boost. In some cases, screens that used to take 15 seconds to respond now answer in less than one second.

This performance translates to greater efficiency for First American's business users and faster closing documents for customers eager to take possession of their new homes. The Itanium 2 processor's high-throughput architecture has even helped slash database maintenance time by 25 percent. The processor also gives First American plenty of room for growth. The upgrade cut CPU utilization rates more than 50 percent compared to the 32-bit solution, according to Godec.

Availability is another area where the Itanium 2 processor has proved its mettle. “This is our core system to produce our product,” Godec says. “We have close to 15,000 people banging on it over the course of the day, especially during month end, when we are inundated with closings. It is absolutely critical that the system be available.

With the Itanium 2-based solution, we have consistently exceeded our service level agreement to our users.”

The cost efficiency of the Itanium 2-based servers has also helped First American increase the robustness of its mission-critical environment. An identical configuration at a second location maximizes availability and helps ensure business continuity. First American also uses Intel Xeon processor-based HP ProLiant* servers and HP Blade Servers* for its front-end and mid-tier infrastructure.

A More Agile, Intelligent Enterprise

In addition to helping the company standardize its workflows and reduce operations costs, First American's unified, Itanium 2-based solution provides the basis for more timely and rigorous business analytics. After deploying the title insurance and closing system, First American established a new data warehouse, running on a separate 16-way Itanium 2-based Integrity Superdome.

The data warehouse receives nightly feeds from the 1.7 TB FAST database server and aggregates 32 days of detailed history for each of the company's offices. Every night, the Intel Itanium 2 processor-based warehouse creates extracts for analytical “cubes” to generate up-to-date reports on business performance. Every morning, managers get the latest information about business performance.

“Executives can make better and faster decisions, because the data they need is available in almost real time, in a consistent format across all office and regions,” Godec says. “There is no way we could have delivered that level of business intelligence with the 50 different systems we used to have.”

Key Technologies

- 32-way and 16-way HP Integrity Superdome* servers powered by the Intel® Itanium® 2 processor
- HP ProLiant* servers and HP Blade Servers* based on the Intel® Xeon® processor and Intel Xeon processor MP for front-end and mid-tier infrastructure
- Microsoft Windows* Server 2003 Datacenter Edition (64-bit)
- Microsoft SQL Server* 2000 Enterprise Edition (64-bit)

Integral Answers

- Servers based on the Intel Itanium 2 processor deliver the performance and scalability for First American's 1.7 TB database, data warehouse and complex business processes. The system handles 15,000 users daily during peak periods and has exceeded service level agreements.
- The Itanium 2 processor's high performance enables First American to continue its rapid growth and cope with fluctuations in the housing market.

With timely information at its managers' fingertips each morning, First American is better able to anticipate and respond quickly to changes in the lending climate. Standardizing its IT environment and migrating business-critical systems to the Intel Itanium 2 processor reinforces agility by enabling First American to rapidly deploy new solutions and capabilities.

With its integrated, Itanium® 2 processor-based transaction system, First American has the scalability it needs for further growth.

Ready for the Future

"Scalability is a must for us," says Sue Binks, vice president of application development for First American. "Our marketplace is in constant flux. We could also acquire a company tomorrow and add 2,000 users overnight. The HP Integrity Superdome* and Itanium 2 processor allow us that room to grow."

As First American continues to move forward, Intel's drive to advance its technologies provides additional advantages. "First American will continue to grow our business and to grow our market share," Godec says. "With the FAST Transaction System and our data warehouse, we have a solid foundation to support that growth. By working with Intel, HP and Microsoft, we've got a team that we expect to grow with us and advance their technologies to keep up with us. We expect Intel's ongoing platform innovations to help keep us on the leading edge and do an even better job for our customers and shareholders."

Find a business solution that is right for your company. Contact your Intel representative, visit the Intel® Business/Enterprise Web site at: intel.com/business or visit the industry solutions-specific sites at: intel.com/business/bss/industry/.

Return on Investment

- The FAST Transaction System, standardized on Intel® architecture, has helped First American optimize business processes, bring consistency across its more than 1,300 offices nationwide, achieve economies of scale and generate over \$50 million in savings annually.
- The Intel® Itanium® 2 processor's outstanding performance accelerates productivity for business users and gets customers their closing papers more quickly. System responsiveness has improved by 20 percent.
- The Intel Itanium 2 processor-based data warehouse enables First American to respond faster to changes in the market. "Before, it took several weeks at the end of every month to consolidate data into a comprehensive report," recalls Godec. "Now, executives can spot trends and perform analysis in near real-time. We can watch trends on a daily basis – from market shifts to interest rate changes to environmental issues that might affect title orders. We're much more agile than in the past."



Solution provided by:



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