CASE STUDY

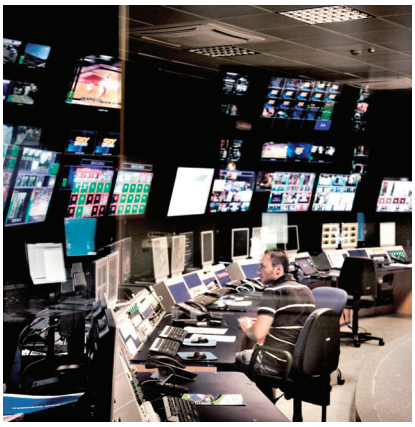
Intel® Itanium® processor 9300 series

Communications/Media
IT Efficiency

High-flying application performance

Sky Italia slashes software processing times and cuts power consumption in half with Intel® Itanium® processor 9300 series

Sky Italia is a digital pay TV company owned by News Corporation. It has always displayed a strong commitment to innovation. To continue using the most advanced technology, it recently decided to migrate an infrastructure supporting a number of business-critical applications from the Oracle Sun SPARC* environment, implemented during its start-up in 2003, to one based on the HP Superdome2* server, powered by the Intel® Itanium® processor 9300 series. This migration has brought a number of benefits including a 50 percent decrease in processing times and power consumption.



CHALLENGES

- **Redesign infrastructure.** Upgrade the existing business-critical infrastructure to increase performance and improve the levels of service provided
- **Power efficiency.** Optimize power consumption in keeping with sustainable development, an area of importance for the company
- **Safeguard investments.** Guarantee scalability and technological support over the medium and long term

SOLUTIONS

- **Effective migration.** The production environment was migrated to HP Superdome2 servers, while those of development and testing were put on HP blade servers, all powered by the Intel Itanium processor 9300 series, totaling over 300 processors

IMPACT

- **Increased performance.** Processing times were reduced by 50 percent on average, with users saving an average of 20 percent on standard tasks
- **Lower energy use.** Replacing systems which had come to the end of their lifecycles made it possible to reduce power consumption by 50 percent
- **Decreased total cost of ownership.** Increased efficiency and productivity, along with simpler management and monitoring, significantly reduced total cost of ownership (TCO). Sky Italia expects a return on investment in six months

"The new environment is more reliable and shows better performance, as well as simplifying monitoring and management. Power consumption has also been cut in half."

Fabrizio Giorgetti
Head of infrastructure project
Sky Italia

State-of-the-art infrastructure

The Information Systems division at Sky Italia supports all of the company's business processes. The company always keeps a close eye on the trends in the information and communication technologies (ICT) sector, often proving to be an early adopter of emerging technology. A new HP Superdome 2 platform, powered by the Intel Itanium processor 9300 series, was an opportunity for Sky to be among the first in Italy to trial a new technology.

Fabrizio Giorgetti, head of the infrastructure project, explains: "We chose to upgrade from the Oracle Sun infrastructure equipped with SPARC processors because it had reached the end of its lifecycle."

After a careful analysis of the enterprise solutions in the marketplace, the company chose the HP Superdome2 server and Intel Itanium processor 9300 series.

"We were familiar with the stability and reliability of this type of architecture, because we had used it before," continues Giorgetti. "We decided to go with the next-generation Intel Itanium processor 9300 series because of the compelling benefits it offered. These included two billion transistors and twice as many cores as the previous generation (four versus two), eight threads per processor, more cache, and an increase of up to 800 percent on the interconnect bandwidth.

"All this guaranteed us a lower TCO than the previous infrastructures," Giorgetti says, "and provides guarantees in terms of safeguarding the investment over the medium and long term."

Sky sees 50 percent performance increase in core application performance with Intel Itanium processor 9300 series

Spotlight on Sky Italia

Sky Italia, the digital pay TV company owned by News Corporation, was established in 2003 to offer Italian viewers the best in national and international TV. As of December 2011, the number of subscribing families was around five million and thirty thousand. The digital platform includes over 190 theme and pay-per-view channels, in addition to 80 audio and digital radio channels, a package of 52 HD channels, and one entirely dedicated to 3D programs. Moreover, through the Sky Go* service, a selection of Sky channels covering news, sports, football, and entertainment can be viewed on next-generation tablets.

Double the performance

This technological refresh involved multiple applications. "For every migrated application," explains Giorgetti, "a detailed analysis was carried out, making the necessary improvements in order to maximize performance and service levels."

One of the applications migrated was for smart card management, which contains all account information about each customer and is essential for timely and accurate billing. The migration delivered a 70 percent decrease in the purchasing time for each individual program. The customer billing system also benefitted significantly "The end-to-end billing process used to take around 40 hours," says Giorgetti. "Since the architecture has been redesigned, processing times have been cut in half."

The team also focused on improving its business intelligence (BI), which had been the source of some critical issues regarding service level agreements (SLAs) with the internal IT department. Migrating its BI capabilities to the new platform made it possible to reduce processing times by several hours, as well as to increase the levels of service provided.

An Oracle Siebel* CRM system, migrated to the new infrastructure, has been distributed to the thousands of stores promoting Sky packages, as well as to call center operators. It also interfaces with many other systems within the company. For this reason, intense testing was required to ensure effective functioning. Batch-level activity times were cut by 50 percent[1], while users can complete a single task or process around 20 percent faster.

Other areas included a portal dedicated to channel partners, document management system for customer correspondence, a Pilat Media IBMS* programming system, a SAP* landscape supporting finance and HR management applications, and the BI system for the advertising division.

Tangible benefits at all levels

Aside from production environments, this migration also involved development and testing environments. The production environments were migrated to the HP platform, while development and testing went to HP blade servers, also equipped with the Intel Itanium processor 9300 series.

"Mission-critical applications sometimes have to keep up with particularly intense spikes in work, requiring high availability across all platform components," says Giorgetti. "The Intel Itanium processor 9300 series fully meets this requirement, with Intel® QuickPath Interconnect (which helps eliminate I/O bottlenecks), and its memory subsystem, along with architecture displaying the typical features of reliability, availability, and serviceability (RAS).

"Moreover, the processor's advanced machine-check architecture coordinates error handling across the hardware, firmware, and operating system," Giorgetti says, "and improves system availability by facilitating recovery from otherwise fatal errors.

"Therefore, the new environment is more reliable and shows better performance, in addition to offering benefits in terms of simplifying activities in monitoring, managing, and optimizing power consumption, which has also been essentially cut in half. Finally," Giorgetti concludes, "the new infrastructure gives us peace of mind for the future, as we can now scale both horizontally and vertically."

Find the solution that's right for your organization. Contact your Intel representative, visit Intel's Business Success Stories for IT Managers (**www.intel.co.uk/Itcasestudies**) or explore the Intel.com IT Center (**www.intel.com/itcenter**).

[1] Software and workloads used in performance tests may have been optimized for performance only on Intel microprocessors. Performance tests, such as SYSmark and MobileMark, are measured using specific computer systems, components, software, operations, and functions. Any change to any of those factors may cause the results to vary. You should consult other information and performance tests to assist you in fully evaluating your contemplated purchases, including the performance of that product when combined with other products.

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