From pain to gain

Italian financial services group embarks on ambitious virtualization project by using the power of Intel® Xeon® processor 7500 series

Unipol Gruppo Finanziario is an Italian financial services operation. Headquartered in Bologna, it was founded in 1962 as a provider of non-life insurance. Today it is the fourth largest insurance provider in the country, with over 7,000 employees. In 2009 it generated revenue of EUR 9.5 billion in insurance and EUR 9.6 billion from banking. Given that much of its recent growth has developed from mergers and acquisitions, it wanted to integrate IT systems and ensure they were characterized by flexibility, agility and dynamism. As a first step, it introduced the Intel® Xeon® processor 7500 series to reduce back-end processing time and increase management capabilities of front-end applications.

CASE STUDY
Intel® Xeon® processor 7500 series
Enterprise Server

CHALLENGES

• Mergers and acquisitions: The organization has grown through a series of mergers and acquisitions which left it with IT systems that were not performing well
• Front-end performance fall: Performance of mission-critical, Web-based applications for front office staff was adversely affected by high data volumes

SOLUTIONS

• Virtualized server farm: Decided to create a virtual server farm across physical environments
• Processor testing: Benchmarked Intel® Xeon® processor 7500 series for performance and virtualization¹ potential

IMPACT

• Moving ahead: Benchmarking revealed that up to 70 to 80 virtualized¹ machines could be created using Intel Xeon processor 7500 series
• SAP* gains: Discovered that it could migrate SAP back-end landscape to virtualized machines
• Open world: Now has open IT systems, which have enabled it to improve disaster recovery operations and consider extending virtualization to other business-critical applications and desktop PCs

In search of change

Like many companies, Unipol Gruppo Finanziario (UGF) has grown over time through a combination of astute business planning, mergers and acquisitions. This also means the organization had differing IT systems and applications inherited from companies bought by the group. For example, among its mission-critical applications there are several Web-based solutions that support the services supplied to its insurance agencies and bank branches. These applications are characterized by a high volume of server transactions. Volumes were so high that there was a reduction in performance which affected front-office operations. UGF began addressing the problem in 2007 with the introduction of a project to create a virtual server farm across a number of its physical server environments.

In 2010 the project took a leap forward when it took an Intel test server, powered by the Intel® Xeon® processor 7500 series, to test virtualization capability and processor performance. Tests showed that the Intel Xeon processor 7500 series enabled a very high virtualization¹ ratio on servers that hosted the front-end Web server applications and databases. Even when high volumes of data processing were run through the machine, the servers did not utilize the full processor resources and application response times were more than satisfactory.

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Morgan Travi, Unipol Gruppo Finanziario
Intel® Xeon® processor 7500 series provides foundation for strategic evolution of the organisation

**Better than good**

Morgan Travi, responsible for UGF’s server farm, said: “This Intel® Xeon® processor delivers much more than you expect. In fact, it is closer to a RISC processor in terms of recovery functionality and high reliability and it runs smoothly 24/7.”

Drilling down into the benchmarking tests, there was an average reduction of 50 percent in batch cycle times, dropping from a previous average of 12 hours to just six. Furthermore, UGF’s tests showed that up to 70 to 80 virtual machines running typical applications could be cost-effectively run by using the Intel Xeon processor 7500 series.

These positive results also led to the realization that it could migrate its back-end SAP* landscape to the virtual machines. “We also tested SAP applications on the Intel Xeon processor and obtained response times that favorably compared with physical servers,” added Travi.

Because the Intel Xeon processor 7500 series has more sockets, more cores and larger RAM capacity than previous generations of Intel Xeon processors, it is the ideal solution for migrating a SAP landscape, not just production applications.

**Green IT**

UGF also has a policy that urgently requires the development of green IT projects to bring about higher-energy savings and reduce environmental impact. Following the benchmarking of the Intel Xeon processor 7500 series and the realization that it consumes far less energy, the company now plans to implement a farm of server machines powered by this processor in order to enable both front and back-end virtualization.

This move ensures optimal business performance for end users and also savings in terms of data center floor space and management costs. The technical user is not only benefiting from time savings but also wider tasks such as change management. Thanks to the level of virtualization enabled by Intel Xeon processor 7500 series, UGF can now easily manage the strategic evolution of the company, including acquisitions. It can integrate various new systems in short time frames.

**New features, new plans**

Marco Grossi, also responsible for the UGF server farm, added: “The new features provided by Intel Xeon processor 7500 series allow us to do things which could not even be imagined before. For example, in the past, if a project were executed with an inadequate sizing, it had to be made from scratch again. Now it can be modified and corrected as the work progresses.”

The server farm project has effectively enabled UGF to create an open world of IT systems and, as a result, it has been able to develop a disaster recovery project characterized by simpler management. The Intel Xeon processor 7500 series has also led it to consider extending virtualization to business-critical applications as well as the virtualization of selected client PCs.

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