



## Success Brief

Dual-Core Intel® Xeon®  
processor technology  
Telecommunications

**“We required a reliable, high-performance platform with the best possible economies of scale. At this precise moment there is no better option than servers based on Intel technology.”**

Antonio Oriol,  
Director of IT outsourcing  
services, Telefónica

## Telefónica Realises Virtual Vision

### Thanks to the Dual-Core Intel® Xeon® processor 7100 series, Telefónica is the first to market with virtual hosting service

Telefónica is one of the world's leading telecom companies, with a significant presence in 23 countries across Europe, Africa, and Latin America. The Group has a market capitalisation of almost US\$100bn (approximately EUR 73bn), more than 1.5m direct shareholders and is listed on the main Spanish and foreign stock markets. Its activities are centered mainly on the fixed and mobile telephony businesses with broadband as the key tool for the development of both.

Telefónica also offers hosting services, including monitoring, back-up and administration services, to large corporates and public sector organisations across Spain. Traditionally, each customer has its own physical server housed within one of Telefónica's four data centres sited in either Madrid or Barcelona. In line with the current trend towards virtualisation – most of Telefónica's corporate customers are testing or have already virtualised part of the IT infrastructure – and in an effort to reduce costs even further for its customers, Telefónica was keen to launch the first virtual hosting service for corporates in Southern Europe.

To support this, it had to set up a high-performance, reliable and scaleable platform with the best possible economies of scale. Over a four-month period, Telefónica, together with Intel, ran an evaluation of cost per virtual server, based on server cost, maintenance, energy consumption, space occupation, and software licensing. It compared a selection of 16-way, 8-way, 4-way and 2-way servers powered by a range of current Dual-Core and Quad-Core Intel® server processors. The result of the analysis showed the price/performance superiority of the 8-way (upgradable to 16-way) server powered by the Dual-Core Intel® Xeon® processor 7100 series.

---

### Measures of Success

- The IBM/Intel hardware platform is a key market differentiator for Telefónica, making it one of the first companies in Spain to offer a virtual hosting service
- Economies of scale mean that Telefónica can pass on significant hardware and energy cost savings to its customers
- In contrast to competitor technologies, Intel server processors enabled Telefónica to choose from a range of hardware manufacturers' products, enabling it to remain vendor neutral

---

Following the evaluation, Telefónica opted to buy four IBM 8-way (upgradable to 16-way) System x3950\* servers running on the Dual-Core Intel® Xeon® processor 7100 series for its two data centres in Madrid. The Dual-Core Intel Xeon processor 7100 series delivers great performance together with the reliability and scalability Intel-based servers are known for throughout the industry. It also features numerous Intel-led innovations that enhance data centre effectiveness including Intel® Virtualization Technology.

Telefónica utilises VMWare ESX 3.0\* facilities (VMotion, HA, DRS) software to move running virtual machines from one physical server to another with no impact to end-users, improving manageability and flexibility.

# IBM 8-way System x3950\* running on Dual-Core Intel® Xeon® processor 7100 series delivers superior performance, reliability and scalability

Customers can expect to see a TCO reduction of up to 40% over three years compared with standard physical hosting, and 20% compared to in-house virtual server projects. Other benefits for customers include: greater speed of provision – from several weeks to several days, improved flexibility, and higher availability.

Thanks to the IBM/Intel solution, Telefónica is one of the first companies in Spain to offer a virtual hosting service, enabling it to stay one step ahead of the competition. In the near future, the company also plans to deploy these platforms in its data centres in Barcelona.

## Return on Investment

- Telefónica customers can expect to see a reduction in their total cost of ownership of up to 40% over three years compared with standard physical hosting and 20% compared to in-house virtual server projects
- Since no hardware needs to be installed, Telefónica is now able to get new customers up and running within a few days, rather than weeks
- Telefónica no longer needs to host separate physical servers for each of its customers, resulting in a smaller data centre footprint and enabling it to take on more clients without increasing the size of its data centre
- Virtual server hosting customers benefit from increased flexibility since the service allows for easy scaling up and down of processing power as and when needed
- The service offers N+1 redundancy, meaning customers should experience no service interruption should one of the components fail



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

**For more information about the IBM System x3950 go to: <http://www-03.ibm.com/systems/x/scalable/x3950/index.html>**

Copyright © 2007 Intel Corporation. All rights reserved. Intel, the Intel logo, Intel Leap Ahead., the Intel Leap Ahead. logo, Xeon and Xeon Inside are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries.

This document is for informational purposes only. INTEL MAKES NO WARRANTIES, EXPRESS OR IMPLIED, IN THIS DOCUMENT.

<sup>1</sup>Performance tests and ratings are measured using specific computer systems and/or components and reflect the approximate performance of Intel® products as measured by those tests. Any difference in system hardware or software design or configuration may affect actual performance. Buyers should consult other sources of information to evaluate the performance of systems or components they are considering purchasing. For more information on performance tests and on the performance of Intel products, reference [http://www.intel.com/performance/resources/benchmark\\_limitations.htm](http://www.intel.com/performance/resources/benchmark_limitations.htm) or call (U.S.) 1-800-628-8686 or 1-916-356-3104.

Intel does not control or audit the design or implementation of third party benchmarks or Web sites referenced in this document. Intel encourages all of its customers to visit the referenced Web sites or others where similar performance benchmarks are reported and confirm whether the referenced benchmarks are accurate and reflect performance of systems available for purchase.

\*Other names and brands may be claimed as the property of others.

0607/KLH/RL/XX/PDF

317714-001-EN

