



Going for gold

The Spanish Olympic Committee turns to industry-leading virtual infrastructure technology

The Spanish Olympic Committee (Comité Olímpico Español) is responsible for Spain's participation in the Olympic Games. It was created on November 23, 1912, and is governed by the Olympic Charter – the regulatory guidelines of the Olympic Movement. The Committee follows the basic principles, rules and legal texts adopted by the International Olympic Committee (IOC) and sets conditions for holding the Olympic Games as well as participating in them. The nature of the employees' roles required a move from a dedicated to a virtual IT infrastructure; in particular, it was eager to roll out virtual desktop. The Committee has 30 employees who travel most of the time. They needed to be able to work from their desktops and communicate with the Madrid office, anytime and from anywhere. To achieve this, COE has implemented a virtual infrastructure at both server and desktop levels, the latter based on computers powered by Intel® Core™ vPro™ processors¹.



“Our people travel far and wide and our operations can be complex. Thanks to Erместel and the Intel® and Citrix technology, a template was implemented that provided users with the same business profile, which can be centrally updated and used from any location. This allows them to retain their personal profiles on their devices while using a virtualized system for COE. It has cut costs, made management far easier and introduced far greater flexibility.”

Manuel Pastrana,
IT Manager, COE

CHALLENGES

- **Central management.** COE has complex desktop and laptop user profiles and event-driven computer needs which were costly and difficult to manage. It wanted a simpler solution that could be centrally managed
- **Greater availability.** Needed to ensure that COE's employees received the most up-to-date files and information quickly
- **Increased storage.** Wanted to increase overall storage capacity of the IT infrastructure

SOLUTIONS

- **Virtualization specialist.** Erместel, an IT reseller specializing in virtualization and IT solutions, developed a virtualized server and desktop solution to meet COE's needs
- **Optimization.** It used Citrix XenClient Enterprise*, a desktop virtualization technology, optimized to run on computers powered by Intel® Core™ processors. At server level it rolled out VMware vSphere*
- **Intel expertise.** The end-user devices were powered by Intel Core vPro processors which include hardware-based Intel® Virtualization Technology² (Intel® VT)

IMPACT

- **Easy and simple.** Virtualized operating system template is created for end-user devices and is centrally managed
- **All apps are go.** Users can travel freely with their own apps on their devices and a virtualized container for their business profiles
- **Fast deployment.** When computers are required for events, they can be set up quickly and easily and connected to the COE data center
- **Flexible productivity.** COE combines centralized management, enabled by virtualization, with intelligent PCs which delivers flexibility, mobility and productivity benefits for users

Day to day at the Olympic Movement

As the national representative for Spain's Olympic endeavors, COE has a high-profile and wide-ranging role. Among other things, it is responsible for submitting Madrid's bid to the IOC to be the host city for the 2020 Olympics, officially known as Games of the XXXII Olympiad. The COE is more involved than ever in this particular bid, since its president and general manager is also heading up the Olympic submission.

As such, COE's executive team is required to attend many meetings, which require extensive travel around Spain, Europe and the rest of the world. So, they not only need to stay in communication with the Madrid-based headquarters, but also often need computer desktops set up at distant locations as quickly as possible.

All this makes COE a dynamic environment, with executives always on the move and requiring connectivity to the COE data center. Low provisioning time for new desktops was important. At the same time, the executives use a broad range of hardware with different application requirements depending on their professional roles and needs. This also had to be accommodated.



Accelerated desktop virtualization delivers lower costs and more effective management

Managing these computing needs was a costly and time-consuming task for COE. The physical infrastructure made it impossible to adapt to the new needs of COE staff. User profiles were wide and varied and users typically didn't have the computing knowledge to manage their own devices. These users, typically VIPs, required two profiles, one for personal applications and the other for professional COE use. Lastly, the physical infrastructure didn't make it easy for employees to access information anytime and from anywhere.

The company turned to Ermestel, a premier Spanish IT consulting and integration consulting company specializing in data center consolidation and virtualization, to carry out the transition to a virtual infrastructure. Its core competency is to help organizations optimize their data centers with higher resource utilization, more flexible use of existing assets, and lower management and administration costs.

COE's objective was to increase storage capacity, improve the availability of files and ease the management of desktop PCs and laptops while taking into account the widely varied user profiles, the user's high status in the organization, and also their limited technology skills. With these aims in mind, Ermestel devised a technology solution to centralize management of the IT platform and configuration of users' computers while lowering the provisioning time for desktops and improving file availability.

Technology boost in virtual desktop

The technology solution is based on Citrix XenClient Enterprise, which is specifically developed to provide optimal performance on PCs powered by Intel processors. XenClient Enterprise provides a hypervisor on the users' computers. The hypervisor enables centralized management, a homogenous operating system image and set-up, and simplified and quick set-up of new desktops.

The XenClient hypervisor takes full advantage of the computer's resources. Because its footprint is low on CPU, memory, and hard disk space, the impact on these resources is minimal. To help with the virtualization of the end-user operating systems, Ermestel used computers powered by Intel Core vPro processors.

Intel Core vPro processors feature hardware-based Intel VT. Intel VT improves the fundamental flexibility and robustness of software-based virtualization, such as XenClient, by accelerating key functions of the virtualized platform. This includes speeding up the transfer of platform control between the guest operating systems and the hypervisor and enabling the hypervisor to uniquely assign I/O devices to guest operating systems. Virtualization was a particularly compelling benefit. It provides a homogenous hardware abstraction layer, so maintenance and deployment tasks are easy. The user can also run two operating system instances on the same device. This permits both a personal and corporate profile and also provides a foundation for future operating system upgrades.

By implementing virtualization on the end-user device, COE also makes significant cost savings. A traditional virtual desktop infrastructure requires the virtualization to take place in the data center, which can be costly.

Lessons Learned

Implementing virtualization on the end-user device offers several benefits. Users are able to run two operating systems, allowing them to have both a corporate and a personal profile. It also helps to reduce costs and improve productivity, since virtualization on the end-user device is simpler to manage and users are able to work even when the network is down. The IT team also benefits from centralized management while employees enjoy greater flexibility and mobility without compromising on user experience.

However, virtualization on the end-user device is simpler and more cost-effective. Users can also work on their devices even when the network is down.

COE has combined the advantages of virtualization with intelligent PCs and, as a result, its IT team now benefits from centralized management while end users gain flexibility and productivity advantages such as enhanced user experience, mobility and greater performance.

Pedro Tortosa, general manager at Ermestel, said: "The combination of Citrix XenClient and Intel Core vPro processors with Intel VT enabled us to provide COE users with a rich client environment without running into excessive costs. It also provides COE with the flexibility it needs to quickly respond to event-driven requests for new desktops without having to dedicate valuable IT resources to deploy each client in a sequential fashion."

Manuel Pastrana, IT manager at COE, said: "Our people travel far and wide and our operations can be complex. Thanks to Ermestel and the Intel and Citrix technology, a template was implemented that provided users with the same business profile, which can be centrally updated and used from any location. This allows them to retain their personal profiles on their devices while using a virtualized system for COE. It has cut costs, made management far easier and introduced far greater flexibility."



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.co.uk IT Center (www.intel.co.uk/itcenter).

Copyright © 2012 Intel Corporation. All rights reserved. Intel, the Intel logo, Intel Core, Intel vPro, and Core vPro inside are trademarks of Intel Corporation in the U.S. and other countries.

¹ Intel® vPro™ technology Intel® vPro™ Technology is sophisticated and requires setup and activation. Availability of features and results will depend upon the setup and configuration of your hardware, software, and IT environment. To learn more, visit <http://www.intel.com/technology/vpro>.

² Intel® Virtualization Technology (Intel® VT) Intel® Virtualization Technology requires a computer system with an enabled Intel® processor, BIOS, and virtual machine monitor (VMM). Functionality, performance, or other benefits will vary depending on hardware and software configurations. Software applications may not be compatible with all operating systems. Consult your system manufacturer. For more information, visit <http://www.intel.com/go/virtualization>.

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. Intel may make changes to specifications, product descriptions, and plans at any time, without notice. For more information go to <http://www.intel.com/performance>

This document and the information given are for the convenience of Intel's customer base and are provided "AS IS" WITH NO WARRANTIES WHATSOEVER, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, AND NON-INFRINGEMENT OF INTELLECTUAL PROPERTY RIGHTS. Receipt or possession of this document does not grant any license to any of the intellectual property described, displayed, or contained herein. Intel® products are not intended for use in medical, lifesaving, life-sustaining, critical control, or safety systems, or in nuclear facility applications.

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