



Migration to vSphere 5.0 Delivers Enterprise Enhancements

Business Transformation through IT Transformation

Summary

vSphere, VMware's flagship product for virtualization, enables customers to build a cloud infrastructure to run mission-critical business applications securely, reliably and with high availability. vSphere, a complex and powerful product, supports a total of 2500 applications from 1400 vendors. As VMware readied the latest release of vSphere, the company sought to validate new features and functions prior to general availability. VMware's IT department engaged with R&D early to vet pre-release versions of vSphere 5.0. As the release date neared, the IT department installed vSphere 5.0 in its production environment, ensuring upgrade steps were clearly defined and modeling best practices with respect to cross-organizational communication.

The Journey

vSphere enables companies to significantly reduce their data center footprint. At VMware, over 4000 virtual machines supporting 160 applications run on 300 ESX hosts within 40 blade server chassis. Non-virtualized infrastructure requires considerably more hardware, physical space and HVAC in order to support the same number of business applications.

"vSphere is a sophisticated product with multiple components to install and set up. To ensure a successful vSphere deployment, understanding the sequence of tasks is imperative," said Joseph Marko, Director of IT Operations, Infrastructure Services. "With an upgrade project of this scope, a major challenge is identifying which applications and services will be impacted by planned downtimes then effectively communicating upgrade details to end users in a timely, efficient manner."

vSphere 5.0 was introduced at VMworld in Las Vegas in August 2011 and delivers many enhanced features for running vital applications (such as Oracle and Microsoft Exchange) in the Cloud. vSphere 5.0 boosts enterprise agility and adaptability while offering a stable, reliable environment.

Marko's organization had approximately 500 VMs live on vSphere 5.0 by general release in late August 2011, and the remaining 3500 VMs were upgraded by December. Having the IT staff VCP-certified (VMware Certified Professional) supported rapid deployment of the new version, noted Marko.

"Building and managing a virtual environment requires an IT person to think a bit differently. We no longer have 'dedicated' anything," said Marko. "Infrastructure investment is highly leveraged, maximizing available CPU and memory capacity while reducing overall cost of server ownership."

The End Result

vSphere 5.0 is one of the most significant product updates to date and offers a broad range of improvements, enhancements and new capabilities. Key features include support for 32 vCPUs for processor-intensive applications and up to 1 TB of virtual memory to an individual VM.

Although vSphere 5.0 offers increased support for different VMware tools versions, IT decided to move forward with a full upgrade which included tools and virtual hardware. "While more challenging due to coordination requirements, we felt the extra work was time well-spent and provides maximum flexibility to our system admin. staff," noted Marko. "In the end, clear and accurate communication to our end users helped IT deliver a great internal customer experience."