



VMware Helps Guardian Retire Unsupported Hardware, Migrate Applications Without Reinstallation

KEY SUCCESSES

- Retired unsupported legacy server hardware
- Consolidated underutilized servers
- Maintained application isolation, avoiding conflicts
- Avoided reinstallation and rewriting of legacy applications
- Minimized downtime
- Eased management challenges of legacy operating systems

VMware's P2V Assistant Saves Time and Costs, Lowers Risks by "Virtualizing" Applications in Place, Migrating Systems in Hours Instead of Weeks

Legacy Applications Complicate Guardian's Efforts to Consolidate

The Guardian Life Insurance Company of America (Guardian) is the fourth largest mutual life insurance company in the United States and is listed among Fortune magazine's top 500 businesses. Guardian and its subsidiaries protect individuals, businesses and their employees with life, disability, health and dental insurance products, and offer 401(k), mutual fund and annuity investment products, and trust services.

Guardian wanted to retire servers that were running on unsupported hardware. The company hoped to:

- Decrease dependence on unsupported hardware
- Consolidate underutilized resources
- Ease the challenge of managing legacy operating systems, to provide time for an orderly migration to Microsoft Windows 2000
- Accomplish these objectives with minimal reinstallation expense and downtime of production systems

VMware Helped Guardian Meet Its Goals in Hours

With the assistance of VMware P2V Assistant and Professional Services team, Guardian was able to migrate machines in hours, rather than the weeks or months it would have taken to re-install applications and rebuild systems. An added benefit was the lowered risk of accidentally corrupting applications.

VMware P2V Assistant provided:

- Efficient movement of complete physical server environments into virtual machines
- Legacy Application Support: Instead of re-installing legacy applications and attempting to recreate operating configurations, Guardian was able to continue running legacy applications in their original environment and maintains status of systems
- Snapshots of unstable systems, "Bug for Bug" offline examination within single physical machine environments, so staff can conduct parallel analysis
- Reduced total cost of ownership (TCO): Lower hardware development, QA and management costs



"Without VMware, migrating these machines would have taken months to years because we'd have to rewrite everything. With VMware, it took only hours, and our systems and configurations were preserved as-is. P2V Assistant really makes life so much easier."

*Suraj Dalal
Senior Systems Engineer, Guardian*



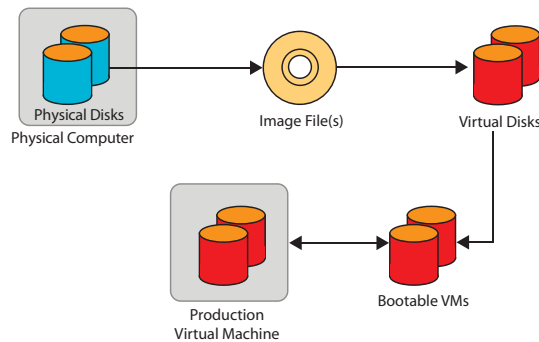
VMWARE VIRTUAL MACHINES AT WORK

- VMware GSX Server and VMware ESX Server
- Images origin machine, virtualizes image, and boots image in VM
- Runs on Windows 2000
- Migrates Windows 2000 SP1, Windows NT SP3 and higher

VMware P2V Assistant and Services Provided Automated Migration of Existing Applications

Guardian's goal was to retire servers that are currently running on unsupported hardware. Many application servers were targeted because they housed single applications to avoid application conflicts, and were running at very low utilization rates. The applications themselves run in Windows NT 4.0 operating environments, and support backoffice tasks such as life insurance application processing and account inquiry and management. Migration to Windows 2000 has been problematic for many of these applications, which were developed years ago and no longer have documentation or installation files in existence. Many also have memory leaks.

"We faced the challenge of consolidating over 100 servers running legacy and/or ill-behaved applications that needed a dedicated server," said Suraj Dalal, Senior Systems Engineer for Guardian. "Without VMware, migrating these applications would have taken months to years because we'd have to rewrite everything. With VMware, it took only hours, and our systems and configurations were preserved as-is. P2V Assistant really makes life so much easier."



With VMware P2V Assistant Guardian was able to capture the existing physical environment and migrate it into a virtual environment, automatically – saving months to years of work, production system downtime, and risk of systems failure.

Moreover, VMware provided Guardian with more than Virtual Server technology. With the assistance of VMware partners, Professional Services, and additional software using P2V Assistant, VMware was able to help Guardian with planning, hardware selection and purchase, application migration, training, deployment, and post-deployment support 24x7.

Only VMware provides more than just the virtual machines.

"With VMware, we gained efficiencies on many levels, from optimizing the utilization of hardware resources and consolidating server platforms, to establishing more effective platforms for testing and business continuity/ disaster recovery. Ultimately, the implementation minimized our infrastructure needs as compared to the traditional 'server sprawl'."

*Warren Jones
Vice President, IT Operations, Guardian*

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