

Graydon, Head & Ritchey

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— Robert Gunyon
IT Manager
Graydon, Head & Ritchey, LLP

KEY HIGHLIGHTS

Challenges

- Support operations with full range of legal applications
- Ensure reliability and availability of IT infrastructure
- Minimize IT headcount and capital expense

Solutions

- Virtualize infrastructure for key applications
- Migrate virtual machines from Microsoft Hyper-V to VMware®
- Centralize management of virtual environment

Results

- Recover 50 percent of VMware investment in two years through reduced licensing costs for application software
- Cut server footprint in half compared to Microsoft Hyper-V solution
- Manage 26 VMware virtual machines with just 15 minutes per week of IT staff time

VMware at work

- VMware vSphere™ 4 Enterprise Edition
- VMware Fault Tolerance
- VMware Data Recovery
- VMware vMotion™
- VMware vCenter™ Server
- VMware vCenter Converter

Graydon, Head & Ritchey, LLP Migrates From Microsoft Hyper-V To VMware, Virtualizing Key Applications And Centralizing Management Of Their Virtual Environment

Like all law firms, Graydon, Head & Ritchey’s business revolves around documents: correspondence, contracts, depositions, briefs and many others.

Most of these documents are electronic, a fact that drives the IT priorities for the Cincinnati-based firm. “Some years back, we had an outage that shut down our email and document management systems for several hours, interrupting our business,” says Robert Gunyon, IT manager for Graydon. “Our management decided that such an incident could never happen again.” That imperative led to a major investment in IT infrastructure—including VMware® virtualization.

The Challenge

Provide Productivity and Legal Applications

Each of Graydon’s 175 employees requires a suite of software including Microsoft Word, Microsoft Outlook, Interwoven FileSite and specialized legal applications. The firm uses Microsoft SQL Server as its database application and Microsoft Exchange Server and Symantec Enterprise Vault for email. Symantec Endpoint Protection provides security for end users.

Over time, as Graydon added applications, its server population continued to grow. “Each software vendor insisted that its application needed a dedicated server,” Gunyon explains. “We wound up with a rack full of 1U pizza box servers that were underutilized and taking up space and power and cooling. We decided to explore virtualization as a more cost-effective and efficient way to deliver our applications.”

Minimize IT Staff and Capital Investment

Just four IT staffers are charged with managing Graydon’s IT infrastructure: Gunyon, his boss, a help desk technician and a programmer. “To control costs, we keep a lean staff and make careful purchasing decisions,” relates Gunyon. “At the same time, we can’t skimp on what we need to accomplish our mission.” As the IT team evaluated virtualization solutions, it placed high importance on ease of use and top-flight tools that would allow the existing staff to install and manage the virtualization environment without outside consultants or extensive training.

The Solution

Always budget-conscious, Gunyon first evaluated Microsoft’s free Hyper-V as a potential solution by virtualizing several key applications. The results were unimpressive. “We got decent performance, but it fell short of meeting all our needs,” he remembers. “We wanted a higher consolidation rate and better management tools.”

Based on a recommendation by his vendor, RoundTower Technologies, Gunyon decided to evaluate VMware vSphere 4 Enterprise Edition on a 30-day trial. It didn't take long to see the difference. "Before the trial was over, I called RoundTower and said, 'Give me a quote, I don't want to take this out,'" Gunyon says. "It was easy to set up, easy to manage, great performance—everything we were looking for."

Deploy Virtualized Infrastructure for Legal Applications

Graydon has virtualized about 75 percent of its environment. The firm is currently running 26 virtual machines on three HP ProLiant DL360 G6 servers. "If we had gone with Microsoft Hyper-V, we would have needed six physical servers—twice as many as VMware," says Gunyon. Graydon also selected VMware vCenter™ Server to manage its virtualized environment.

Migrate Microsoft Virtual Machines with vCenter Converter

To speed the installation process, Gunyon wanted to bring the Microsoft virtual machines into the vSphere environment. VMware vCenter Converter did the trick. "We converted the Microsoft VMs to VMDKs easily and quickly," Gunyon says. "We even did physical-to-virtual conversions on several boxes with no issues. That's something we couldn't accomplish with Microsoft Hyper-V."

Virtualize Exchange and SQL Server with VMware Fault Tolerance

To avoid outages, Graydon has historically run Microsoft SQL Server and Microsoft Exchange Server on physically clustered servers. However, based on the firm's experience with VMware, Gunyon is moving to virtualize these two key applications soon, bringing the total virtualization to 90 percent. He plans to use VMware Fault Tolerance to provide the required reliability, removing the need for dedicated redundant servers while avoiding outages due to a physical server failure.

Results

Save on Licensing Costs for Key Applications

The move to VMware Fault Tolerance will offer significant cost savings for Graydon. "Right now, we pay enterprise licensing fees for our critical applications because they run on clustered physical servers," says Gunyon. "VMware Fault Tolerance gives us the zero downtime we need for SQL Server and Exchange without using dedicated physical servers. The savings in software licenses next year will pay back half of our investment in VMware."

Manage Virtual Infrastructure with Minimal IT Staff Time

The vCenter Server management software has turned out to be a big timesaver for Gunyon. "vCenter is light years ahead of the competition," he says. "The layout is intuitive, so I can easily find what I need. I spend almost no time—less than 15 minutes a week—managing our VMware environment, thanks to vCenter." Other IT staffers occasionally use vCenter and find that they can quickly locate the information they need.

Streamline Maintenance Operations with vMotion

In line with their commitment to keep its infrastructure healthy and up to date, Graydon's IT team performs periodic maintenance and regular server upgrades. Gunyon discovered how VMware vMotion™ can add value to those tasks when he recently swapped an older server for a new Nehalem-based model. "I moved all the apps off the old server, installed the new one, moved everything back—and our users had no idea that anything had changed," he recalls. "Without vMotion, we would have had to perform this operation during evening or weekend hours."

Provide Business Continuity with Data Recovery

To improve the firm's ability to recover from a server crash, Gunyon has recently deployed VMware Data Recovery. Data Recovery takes snapshots of the virtual servers every two hours, which are stored in the Kentucky office. "Data Recovery gives us added protection and is a good first step toward a comprehensive business continuity solution," says Gunyon.

Scale Easily to Virtualize Additional Applications

Even with just three physical servers hosting its virtual environment, Graydon is running at a relatively low CPU utilization level of 15 percent to 20 percent. That efficiency surprised and pleased Gunyon—and gives him options for further virtualization. "We expected to max out the servers with the applications they are currently running, so it's been a pleasant surprise to have so much additional capacity," he says. "We can virtualize additional applications in the future without buying any hardware other than a little more memory."

Looking Ahead

Based on Graydon's positive experience with VMware to date, Gunyon is evaluating VMware desktop virtualization. "Managing 175 PCs eats up a lot of our IT staff time," he says. "By using VMware View™ 4, we can not only save management time but also have better control over the user experience. We'll be able to support old legacy apps such as WordPerfect and older versions of Windows that are needed for specialized applications. In addition, we can provide better security for the entire environment without having to constantly upgrade 175 instances of antivirus software."

Gunyon reflects on the decision to deploy VMware: "My boss and I wonder why we waited so long to make the move to VMware. At the end of the day, you go with the market leader, and that's VMware."

