JENNER&BLOCK LLP

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Network Specialist,
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KEY HIGHLIGHTS

Challenge

Save substantial money by shrinking the hardware footprint while improving the performance, availability and manageability of key applications

Solution

Use VMware Infrastructure to dramatically consolidate hosts while beefing up the performance and reliability of applications like SQL Server

Jenner & Block LLP

The law firm of Jenner & Block blends a venerable history—it was founded in 1914—with the savvy leveraging of information technology. To get powerful results from a lean infrastructure, Jenner & Block relies on VMware technology. "This is a law firm, so most people here aren't concerned about how our IT infrastructure's set up," observes Network Specialist Brian Doyle. "What they care about is, 'Is it up?' and 'Is it fast?' Since we've been running our key applications on VMware Infrastructure, the answer to those questions has basically been 'yes,' which makes our users—and us—very happy."

Jenner & Block began virtualizing servers and applications in 2007 as part of a drive to centralize its datacenters at a co-location facility near its Chicago headquarters. Doyle says the virtualization project was an easy sell: "When you tell your CIO that he's going to need 1,000 square feet less in the co-lo because we're going from 10 racks down to two, he's pretty onboard with that." When the project was complete the following year, the firm had substantially reduced its hardware requirements, not only at its co-location site, where they've gone from more than 100 to just seven IBM x3850 servers, but at its four offices around the U.S. The datacenter at firm headquarters, which once held more than 100 servers, now has just four, which are used primarily for disaster-recovery protection for the co-location site. Two of the firm's three satellite offices also have small datacenters, and thanks to VMware technology, they're smaller than ever: Each office now has just one host handling local tasks like print servers and Active Directory.

Besides the dramatic server consolidation, Jenner & Block's CIO also appreciates the way VMware management tools such as Distributed Resource Scheduler, VMotion and High Availability free up the IT staff's time—though perhaps not as much as Doyle's wife. "She enjoys that a lot," he jokes, adding that the performance and management benefits are serious. "The ability to put all these virtual machines out there and let VMware Infrastructure manage them for us, that's huge," Doyle says. "We just let it decide where to move virtual machines, when to move them, and how many resources each one requires." In the rare instances when a problem isn't solved before it starts or fixed automatically, VMware technology makes it easy for Doyle and the other two members of his server group to set things straight—sometimes from an iPhone. "We used Citrix to publish vCenter as an iPhone app," Doyle explains. "I've rebooted a server from my phone in a restaurant."

Rightsizing Applications with VMware Infrastructure

Doyle says that business-critical applications like Microsoft SQL Server run better than ever on virtual hosts, which also allow for flexible resource provisioning. "We occasionally look at the specs to see what SQL Server is actually using, and of course it's not using what the SQL DBAs think it should be using," he says. "It's much less. VMware Infrastructure lets us put servers out there with far fewer resources than the vendors' specs call for, and they run just fine. And if we decide they need more resources, we can beef them up on the fly. That's a really nice benefit."

VMWARE AT WORK

VMware Infrastructure 3.5 Enterprise, featuring:

- ESX 3.5 with VMFS
- VMware vCenter
- VMware Consolidated Backup
- Capacity Planner
- VMotion
- Distributed Resource Scheduler (DRS)
- High Availability (HA)
- Update Manager
- Site Recovery Manager

DEPLOYMENT ENVIRONMENT

- ESX 3.5 running on IBM x3850 M2 quad-core quad-processor servers with 40 GB of RAM connected to an EMC CX3-80 SAN
- Guest operating systems: Windows Server (2003, 2008) and Windows XP
- Mission-critical applications running in production on virtual machines: SharePoint Server, SQL Server 2005, Kronos Workforce Payroll, Active Directory, printing, core network services, and a wide array of legal applications

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Another area where Jenner & Block is making the most of VMware technology is disaster recovery. Indeed, VMware Site Recovery Manager (SRM) is fast becoming the foundation of the firm's disaster-recovery strategy. "We recently installed SRM and I was surprised how easy that was," Doyle says. "Our VMware systems engineer came over to help, and we set it up in an afternoon. SRM formulated a lot of failover plans automatically, and I've added some more plans and configured a few protection groups. We don't plan to failover every single virtual machine because some of the ones we have in our production environment are things we can live without in the event of a disaster, but the main ones are all in there. Knock on wood, we haven't actually had to use SRM's recovery capabilities, but the tests we've done leave me feeling confident that we'll be in good shape if trouble strikes. And the testing is really straightforward: just hit the button and let 'er rip."

Looking ahead, Jenner & Block is running a pilot to evaluate VMware View. The initial plan is to use it to provide economical, centrally managed virtual desktops to the firm's Litigation Support Department. "They're involved with e-discovery and other resource-intensive tasks," Doyle explains. "Right now each of the 20 or so people in the department has three to five machines apiece. We're going to virtualize them so they can use their USB drives and CDs from their desks and never have to touch a physical machine. Assuming that goes well, we'll probably expand the virtual desktop program to more users at the firm."

When he adds up all the benefits that Jenner & Block has reaped from VMware software, Doyle paints a compelling picture. "It's not just all the money we've saved on hardware, power, cooling and co-location costs because of server consolidation," he says. "It's also the ability to recover right away if a piece of hardware dies, the capacity to roll out servers on the fly, the freedom we've gained from automated management tools, and the flexibility to use our resources where we most need them. If you look at the big picture, I guess you could say that VMware Infrastructure has freed up the way we do things around here. It not only makes things easier for us in IT, it helps us ensure that IT aligns with the firm's business goals, from saving money with a leaner datacenter to improving client service with a more reliable computing infrastructure."

Results

- The firm's hardware requirements at its co-location center have shrunk from more than 100 servers to just seven
- The datacenter at the firm's main office has gone from more than 100 servers to four
- Power usage has been cut by more than half
- The firm's IT infrastructure is 90 percent virtualized, with a VMware-first policy for all new servers
- Business-critical applications like SQL Server are more reliable and faster than ever before—while consuming far less computing resources
- New virtual machines are up and running in less than an hour, instead of the days or weeks it takes to deploy new physical hosts
- Site Recovery Manager simplifies and improves the firm's disaster-recovery capabilities

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