

Law In Order refreshes production environment ten times faster, improves customer service and software license compliance with Dell solutions



- Cloud Computing
- Dell Systems Management
- Power & Cooling
- Storage
- Virtualization—Server



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Paul Gooderick, Director, Law In Order

Customer Profile

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| Company: | Law In Order |
| Industry: | Services |
| Country: | Australia |
| Employees: | 230 |
| Web: | www.lawinorder.com.au |

Business Need

Law In Order needed a more efficient way to refresh its production environment that processes large amounts of data for e-discovery projects. In an environment where machines are re-imaged daily, the company needed better control over image management and deployment. It also wanted to standardize on one provider for servers and storage to support its administrative environment, half of which is virtualized in a private cloud.

Solution

The company deployed Dell KACE™ Virtual Management and Virtual Deployment Appliances as virtual machines running on Dell PowerEdge™ servers with Intel® Xeon® processors for an all-in-one systems management solution. To support its administrative network and back-office applications with a minimum of physical hardware, Law In Order rolled out Dell PowerEdge servers virtualized with Microsoft® Hyper-V™, along with Dell PowerConnect™ switches and Dell PowerVault™ storage.



Benefits

- 10-fold faster refreshes of production environment
- Now updating production images twice as often
- Able to respond to specialized customer requests the same business day
- 400+ hours of staff time saved per year in image management alone
- Faster, simplified operating system upgrades
- 80% reduction in time required to solve software-related issues
- 100% software license compliance
- At least a week of IT staff time saved per year preparing for audits
- 80% decrease in power and cooling requirements for virtualized servers
- Able to recover virtual servers in minutes
- Enhanced test/dev capabilities
- Projected payback on Dell KACE Appliances in less than 12 months
- Fast delivery from Dell helps meet customer deadlines

Efficient document management is as critical to the success of a law firm as efficient systems management is to a successful IT organization. Lawyers' time is expensive, and the faster they can access the information they need, the more effective and profitable they can be. Many feel that outsourcing document processing to a third party is well worth the investment.

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*Paul Gooderick,
Director, Law In Order*

The Internet has forever transformed the role of the legal copy bureau. In addition to traditional hard-copy tasks such as photocopying and court copying, providers of legal copy services must now offer secure, confidential document processing online in order to stay competitive. The transition from paper to electronic documents, while not yet complete, has dramatically increased the amount of data these companies must store and process.

Devil in the details

Law In Order has provided document processing services to the Australian legal industry since 1999. With fully equipped bureaus in Sydney, Melbourne and Brisbane, the company offers both hard-copy processing and electronic services, including e-discovery services, to over 1,300 law firms, corporations and government agencies. Many of these services are available 24x7.

To crunch the large volume of data it receives from customers for e-discovery projects, Law In Order relies on a production infrastructure of around 100 custom-built computers running Windows. These machines are dedicated to churning through documents: extracting metadata from emails or PDFs, for example, or scanning millions of pages via optical character recognition (OCR). To store this data, Law In Order uses Dell PowerVault MD3000 highly available modular disk storage arrays.

"It's a fairly brutal environment," says Paul Gooderick, director, Law In Order. "These machines are often running at 100 percent utilization for 24 hours a

day, so they get hit pretty hard. And it's a dirty environment. We get everything from viruses to macros—all the sort of junk that you find in emails and on file servers."

To start each day with a clean scenario, Law In Order re-images the production machines daily. "As long as the image didn't change, this was not a time-consuming process, because we had an automated imaging tool," explains Gooderick. "The problem was that the images did change, and

Technology at Work

Solutions

[Dell KACE™ VK1000 Virtual Management Appliance](#)

[Dell KACE VK2000 Virtual Deployment Appliance](#)

Hardware

[Dell™ PowerConnect™ 5324 and 2848 Ethernet switches](#)

[Dell PowerEdge™ R710 servers with Intel® Xeon® processors 5500 series](#)

[Dell PowerVault™ MD3000 highly available modular disk storage arrays](#)

[Dell PowerVault MD1000 direct-attached storage arrays](#)

Software

[VMware® ESX Server](#)

[Windows® 7](#)

[Windows Server® 2008 Enterprise Edition with Hyper-V™](#)

they were changing more frequently, with a number of our applications being updated on a regular basis and Microsoft patching things quite often. Every time we changed an image, we had to bring the image back to baseline, make the change, then re-deploy the images to the machines, change all the licensing, and then get production going again."

Even small changes were time-consuming, requiring the same procedure. "Consequently, we were fairly circumspect about when we did make changes to the baseline for those environments, but we still had to do so every couple of weeks," says Gooderick. "Each baseline change would take about 20 hours of a technician's time."

Time to value in a few days

Gooderick began looking for a solution that would allow for more efficient image management and deployment. "We wanted the ability to deploy modified images very quickly out to all of the production machines and not have to worry about dealing with baseline images on each of those machines," he says.

After reading positive reviews about the [Dell KACE VK2000 Virtual Deployment Appliance](#), which automates deployment and maintains a centralized deployment library for integrated management of images, Gooderick decided to evaluate the solution. As Law In Order was already a Dell customer for servers and storage, he reached out to his Dell representative.

"We were getting productive use out of the KACE VK2000 Virtual Deployment Appliance within a few days," says Gooderick. "It turned out to be exactly what we needed. It was very easy to deploy as a [VMware](#) virtual appliance, and Dell made sure that we had consulting time with a trained KACE specialist."

10-fold faster refreshes of production environment

Now Law In Order can make changes to the baseline and redeploy images in two hours or less—ten times faster than before. "The scripts just need to be set up to run at the right time in the

morning," he says. "If one machine gets damaged from a software perspective in some way during the day, we can immediately re-image that machine once we identify the issue."

Due to the ease of updating its production environment, Law In Order now changes the baseline image twice as often as before—while still saving more than 400 hours of staff time annually.¹ "If we discover issues in the environment that need to be modified to complete a client's job effectively, we can roll those out very quickly with the KACE VK2000," says Gooderick. "That improves the quality of our work and allows us to be more flexible. We can respond to specific customer requests, often the same business day, whereas previously it might have taken us several days to refresh the environment and get ready for the job."

The KACE Virtual Deployment Appliance will also save time as Law In Order upgrades its production machines to [Windows 7](#) to increase throughput and complete jobs even faster.

80% reduction in time to resolve software issues

Law In Order also deployed the [Dell KACE VK1000 Virtual Management Appliance](#) for asset management and inventory, software distribution and patch management.

"We use the KACE VK1000 for software distribution and patching daily, and it rapidly became essential for our IT support team," says Gooderick. "KACE improved our quality of service, making internal clients happier through faster resolution of software issues. We've reduced the time required to resolve software-related issues by 80 percent using the KACE VK1000."

KACE also allows scheduled installations and automated scripts to be run after hours, so computers are routinely updated without disruption to the production machines during working hours.

100% software license compliance

The K1000 inventory process discovers installed software on machines, allowing the associated licenses to be tracked

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against the number of installations using K1000 asset management. "Our software licensing was getting out of control," says Gooderick. "We needed to get our arms around our inventory."

Tracking for software compliance can be automated; for example, by defining filters to include all current and future versions of an application in the license group, an administrator can monitor the number of licenses installed automatically, even as new versions of an application become available.

"We now have complete visibility over our software licenses, which we didn't have previously," says Gooderick. "That was a bit of an eye-opener, because it alerted us to areas of risk exposure through unauthorized installs. The KACE VK1000 Virtual Management Appliance completed the picture of what we needed to do to be fully legally licensed. I'm confident that we're now 100 percent compliant with all our software vendors."

Saving a week a year on audit preparation

Law In Order is also saving at least a week of staff time that used to be required to prepare for the company's annual audit and asset register update. "Figuring out how many licenses we required used to take a huge amount of time," says Gooderick. "Now we have that information at our fingertips. Our desktop support guys absolutely love the KACE VK1000. There's a benefit there in that our staff members feel like we're using leading-edge technology. One of our key measures from a company vision perspective is to ensure that we motivate staff and

keep them, and help them be the best that they can be."

The combined deployment and management efficiencies are allowing Law In Order to improve service and compliance while maintaining a lean IT staff. "I was reluctant to add staff for something that is such a repetitive process," Gooderick notes.

Recovering non-critical systems in minutes

Law In Order uses Dell servers for its administrative environment, half of which is virtualized in a private cloud to enable rapid resource creation and allocation. The private cloud is supported by five [Dell PowerEdge R710](#) servers with Intel Xeon processors running Windows Server 2008 Enterprise Edition with Hyper-V. To segment its network into VLANs, Law In Order uses [Dell PowerConnect 5324](#) and [2848 Ethernet switches](#). [Dell PowerVault MD1000](#) direct-attached storage arrays are used as storage for the private cloud environment.

With 25 virtual servers running on just 5 physical hosts, Law In Order requires only 20 percent of the power and cooling resources it would otherwise need to support the applications in its private cloud.

"Management costs are down substantially with Hyper-V, and redundancy for non-critical systems is much higher because now we just back up the Hyper-V instances," says Gooderick. "If we have an outage or a drive failure, we can spin up the virtual machine on another server within a few minutes. Previously, in some cases, we had to rebuild non-critical

systems from scratch, because as a small business, we just couldn't afford to have an array of standby hardware and replication processes for non-critical systems. It could sometimes take a day for us to get those systems back up again."

Virtualization is also streamlining Law In Order's testing and development, providing the ability to create and destroy test/dev servers on demand, without requiring a separate physical infrastructure. "Hyper-V allows us to take a copy of a production environment and replicate that, change the configuration, run tests on it, and then once we're finished, just blow it away," says Gooderick. "Our ability to test is significantly enhanced."

An effective relationship

Law In Order is keeping costs down while serving customers better with Dell's technology and direct business model, says Gooderick.

"We will likely see payback on the KACE appliances within 12 months of purchase," he concludes. "Another reason we stick with Dell is the speed at which Dell is able to make delivery. Given that we are driven by the demands of our clients, we need to move pretty quickly when we get a big e-discovery project that might require incremental storage or processing power to complete the job. Dell has been great in that regard. It's been a very effective relationship."

¹Previously refreshed production environment approximately 26 times per year * 20 hours of staff time per refresh = 520 hours; now refreshing approximately 52 times per year * 2 hours of staff time per refresh = 104 hours; 520 - 104 = approximately 416 hours saved annually.



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