

PRACTICE TIP

Going Green

It's Easier Than You Think

By Edward Grubb and Michael Savino

According to the International Legal Technology Association ("ILTA"), more than 60% of business-critical information is stored in messaging systems. In addition, *Network World* (www.network-world.com) reports that the use of electronic communications alone, such as e-mail, is increasing 20% per year. With the explosive increase of electronic records and information being created, law firms are facing the challenge of transitioning from using physical records to working with digital ones.

All organizations, including law firms, struggle with records management and how to handle electronic records. Organizations have underestimated the effect that e-mail would have on how business is conducted and how law firms communicate with each other and with clients. In addition, document production and retention is a major issue at law firms that historically produce massive amounts of paper documents. Many firms are beginning to save documents digitally, which helps them become more environmentally friendly.

The increased use of electronic communications has in turn increased the need for storage and data backup, space for servers and electricity required for keeping those facilities cool and all that

equipment powered. According to CNET.com, the *daily* power consumption of a typical data center is equivalent to the *monthly* power consumption of thousands of homes. The effect of law firms' current working environment means, in many cases, the organization is not operating in a "green" manner in terms of its use of IT. Below is information that law firms should consider in order to use IT more efficiently and, ultimately, in a more environmentally friendly manner.

'ENVIRONMENTALLY FRIENDLY' DOCUMENT MANAGEMENT

Taking advantage of document-management systems can not only effectively and efficiently enable law firms to handle the increase in electronic data, but also help firms operate in a more environmentally responsible manner.

- Document profiles used in many document-management systems allow firms to save messages and documents with client/matter numbers associated with them, making it easy to retrieve data and thus reducing the need to print or fax e-mailed information.
- Energy efficiency is gained by enabling firm-wide, online access to all client/matter information. The days of printing and photocopying piles of documents for all attorneys working on the same client matter are over via the effective use of document-management systems.
- The need for paper records and storage needs are reduced, therefore decreasing the energy required to preserve physical records in a controlled environment. The need for printing and storing boxes upon boxes of documents is dramatically reduced if

firms use a document-management system to its full capability. Energy use also is reduced in that fewer boxes are transported to storage facilities by gas-guzzling vehicles.

ADDITIONAL 'GREEN' IT PRACTICES

Beyond document-management systems, below are many other ways that firms can operate their IT functions in a more "green" manner.

Establish IT Operations in a Hosting Environment

Save on electricity usage by reducing the number of redundant data center environments, thereby reducing the organization's carbon footprint. We have found that approximately 75% of law firms maintain their own data center rather than operating in a hosting environment.

How would a law firm transition to an IT hosting environment? First, the firm would choose a managed services provider who would work with it with every step of the process — finding appropriate space and becoming part of a larger data center, moving servers, coordinating system downtime during transition and testing to ensure the hosting environment is functioning properly. Becoming part of a larger data center allows firms to avoid duplicating energy consumption by operating an entirely separate center just for their own servers.

Utilize an SaaS (Software-As-a-Service) Application Delivery Model

With SaaS, a software vendor hosts a Web-native software application and operates it for use over the Internet, helps enable telecommuting and potentially vastly extends the life of PCs. This results in an energy savings as well as a reduction in the disposal rate of computer equipment.

Edward Grubb is general manager, legal managed services, and **Michael Savino** is general manager, professional services, at mindSHIFT Technologies, a provider of managed IT services to small and medium-sized organizations.

By consolidating software into one location with an SaaS model, firms no longer need to maintain the systems infrastructure (*i.e.*, building a server, retaining space to house the server, etc.) to maintain the software separately, thereby reducing energy consumption. To take advantage of the SaaS model, firms simply choose a provider, buy the service and pay a monthly fee. The service is Web-based and delivered via an Internet browser.

Adopt Virtualization

Virtualization decreases the number of servers required, thus saving on power and A/C. How does this work? Imagine only being able to run one software program at a time on your computer. Users take it for granted that multiple softwares can be run simultaneously. However, organizations typically don't consider running more than one operating system at the same time. Virtual servers and virtual desktops let organizations run multiple operating systems and multiple applications simultaneously on less physical hardware. Virtualization fosters energy savings and lower capital expenses due to more efficient use of a firm's resources, as well as better desktop management, increased security and improved disaster recovery processes.

According to TechTarget.com, network virtualization is a method of combining the available resources in a network by splitting up the available bandwidth into channels, each of which is independent from the others, and each of which can be assigned to a particular server in real time. Storage virtualization is the pooling of physical storage from multiple network storage devices into a single storage device that is managed from a central console. Server virtualization has the benefit of increasing the scale of a firm's infrastructure without having to purchase additional pieces of hardware.

To set up a virtual server, for example, firms should first decide which virtualization platform they wish to use. Microsoft and VMWare both provide server virtualization software, each having their respective merits and pitfalls. It is important to understand the firm's needs and how they correspond with the software's features. Once the virtualization platform is chosen, the actual virtual environments, commonly referred to as VMs (virtual machines), can be created.

The process is very similar to installing an operating system on a physical server,

but here firms can actually have multiple servers running on the same physical server. As an example, think of collapsing four physical servers into four VMs that all run on only one physical server. This physical reduction tends to reduce power consumption, A/C requirements and eliminate the need for three more physical servers. Collapsing servers does take some design since firms would have to be careful in balancing the increased resource requirements of the four VMs sitting on top of the one physical server.

Utilize Blade Server Technology

This allows for more physical servers in less space with improved power and cooling management. Simply put, blade servers are self-contained computer servers, designed for high density. The case in which blade servers reside — the chassis — include a single power source for all blades within it, which reduces the number of power supply units, increasing energy efficiency. According to Gartner, 70% of CIOs are responding that power and/or cooling issues are now their single largest problem in data centers. To take advantage of blade server technology, firms first should clearly understand the capabilities of blade servers. Not all applications will run well on blade server technology, but ultimately this depends greatly on the data-processing needs of the firm and the blade technology under consideration. After designing the blade server application migration, operating systems and applications can be installed on the blade servers.

Blade servers are a key server consolidation and infrastructure management technology whose deployment can deliver the needed increase in performance while giving data center managers new ways to cut power consumption and costs.

Application Acceleration

Application acceleration allows servers to be removed from remote loca-

tions to centralized sites, thus reducing redundancy in servers, power and cooling. Additionally, more bandwidth at less cost is becoming a critical issue, because over time any given firm will reach a physical limit to how much bandwidth can be deployed to any one location.

An application accelerator is hardware that is implemented by placing it on both sides of a WAN (wide area network) connection that links a remote office with the centralized data center. It acts as an intelligent bandwidth manager, making applications feel as responsive as if they were right there in the same office. How does this work? An application accelerator effectively catches data and only transmits new data or changes across the link, thus dramatically reducing the amount of data flow over the WAN and therefore also significantly shrinking the time to deliver data at the remote end. They work well in low-bandwidth and/or high-latency (long distance) situations.

CONCLUSION

Becoming a more environmentally friendly firm typically consists of making small changes over a period of time. Particularly for law firms, beginning by using a document-management system is a good start, and offers the very important benefit of providing clients with matter information with greater efficiency and clarity. Little by little, firms can save money, operate IT more efficiently and reduce their overall carbon footprint by implementing some, of not all, of the suggested "green" IT methods above.

Reprinted with permission from the September 2008 edition of the LAW JOURNAL NEWSLETTERS. © 2008 ALM Properties, Inc. All rights reserved. Further duplication without permission is prohibited. For information, contact 877.257.3382 or reprints@incisivemedia.com. ALM is now Incisive Media, www.incisivemedia.com #055081-10-08-0013



We make IT work for your business.®

www.mindSHIFT.com
(877) 227-5054
info@mindSHIFT.com