

LBBS Wins the Case for Balanced Backup and File Sharing



With more than 785 attorneys and 21 offices nationwide, Lewis, Brisbois, Bisgaard & Smith LLP (LBBS Law) is one of the largest law firms in the United States. It is a full-service law firm with over thirty practice areas, dedicated to working closely with clients across a broad spectrum of industries to deliver exceptional service. LBBS Law is frequently recognized for its commitment to diversity, and actively fosters a culture committed to promoting the interest of clients, community and the legal profession.

The Challenge: Ever-Increasing Data Volume Requires Robust Backup and Rapid Retrieval

As a dynamic and diversified legal firm, LBBS Law was faced with an ever-increasing volume of data that needed to be stored, managed, and protected. Given the sensitive nature of legal data and long retention periods that are driven both by regulation and by the extended nature of legal proceedings, continued data growth is certain. The IT department constantly evaluates its underlying infrastructure to ensure that it is poised to meet these growth challenges, and adapts quickly to useful technology innovations, such as virtualization.

The firm stores both structured database data and unstructured data, including a growing number of file shares. LBBS Law uses VMware for both server virtualization and its Virtual Desktop Infrastructure (VDI). Although the company had employed a comprehensive tape backup system for many years, the system was proving increasingly difficult to extend and manage in a cost-effective manner.

Growing data volumes meant that more data needed to be backed up in the available backup window. Backing up more data, in turn, led to greater challenges in rotating data offsite for business continuity, as well as increasing difficulties in recovering data quickly from tape. In order to ensure that backup and recovery processes would meet the needs of its growing practice, LBBS elected to implement disk-based backup. However, the firm wanted to minimize disruption and continue to use CA ArcServe as its backup management application.

When LBBS Law went looking for a storage system to backup data to disk, IT Director Arthur Leaser realized that the system chosen would need to deliver high performance, as well as high capacity, at an affordable price. High-performance disk was required so that backups would complete well within the limited nightly backup window, ensuring data would always be fully protected from disaster or error. Just as important, high performance would also ensure rapid data recovery, so that lawyers and support staff would not encounter any costly delays in retrieving and accessing data for clients.

Traditional hard disk-based storage, although faster than tape in randomly accessing data, is still subject to latency, as the mechanical head must move to the data location on the disk platter. Solid-state disk (SSD) slashes this latency to microseconds, so performance is many times better. However, on a capacity basis SSD is significantly more expensive than hard disk, making it an uneconomical choice for storing data long term.

The Solution: Tintri IntelliFlash

Tintri IntelliFlash was found to be an ideal solution. It is an advanced hybrid system that combines high-performance DRAM and flash SSD with less expensive hard disk and a comprehensive set of data management and protection features to deliver both speed and capacity at an affordable price.

IntelliFlash

Challenges

- Backup and recovery processes not meeting needs of LBBS' growing legal practice
- Ever-increasing data volume hitting the limits of available backup window
- Achieving rapid data retrieval from backups
- Large pool of unstructured file data driving capacity requirements past incumbent capabilities

Solution

Tintri IntelliFlash™ T-Series

Results

- Backup windows dramatically reduced
- Unstructured file storage capacity reined in
- Multiple workloads supported on single system

"I was immediately impressed with how IntelliFlash accelerated and improved our backup operations," said Leeser. "Backups are significantly faster, and I feel very comfortable with our ability to restore data very quickly from snapshots on disk. Switching to disk-based backup has addressed our backup window issue and returned administrative time we used to spend managing physical tapes so we can work on higher priority projects."

The IntelliFlash architecture accelerates storage performance and utilizes SSDs very efficiently. Rather than storing data and metadata together, with metadata being interspersed amongst data on disks, IntelliFlash organizes and stores metadata on high-speed devices with optimized retrieval paths. This accelerates every storage function within the system, raising the performance of near-line SAS hard disk drives beyond the level of extremely expensive high-RPM SAS or Fibre Channel drives.

IntelliFlash uses DRAM as an extremely fast level 1 read cache and uses flash SSDs as a second level of non-volatile read and write cache. Unlike systems which rely entirely on flash for data storage, IntelliFlash always protects user data by storing it permanently on spinning disks, while using faster flash and the even faster DRAM as high-speed caches.

LBBS Law's hybrid system incorporates high capacity SAS hard disks to deliver 40TB of usable storage, delivering the economical high capacity LBBS Law needs to accommodate its unrelenting data growth. In line de-duplication, thin provisioning and compression mean that the law firm uses fewer disks than traditional systems to store the same amount of data. LBBS Law is compressing data by approximately 33%, so its 40TB system is effectively providing 52TB of capacity.

When LBBS Law saw that it was effectively gaining an additional 12TB of reliable, high-performance storage capacity, the firm decided to put Tintri's claims of multi-tenancy agile storage to the test. When they needed to add additional file share capacity, the IT department put primary data on the system and started using it as a high-performance Network Attached Storage (NAS) device as well.

The Results: Faster Backups and Agile Storage

"IntelliFlash is so easy to deploy and configure for a multitude of uses that taking advantage of the extra available capacity for file sharing made sense," commented Leeser. "We have deployed virtualization to help us consolidate operations and be more efficient, but it places a lot of performance strain on storage. IntelliFlash takes virtualization in stride and we are very happy with its agility and how well it fits into our environment." In fact, IntelliFlash has performed so well beyond its original use case as a backup accelerator that LBBS Law has added IntelliFlash storage as primary storage to support its growing needs for high-performance file sharing in the future.

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Arthur Leeser, IT Director, LBBS Law

Experience Different! For more information on how Tintri IntelliFlash can turbo-charge your business success through a simple, Intelligent Infrastructure visit tintri.com/intelliflash.



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