

## CASE STUDY

# Tintri IntelliFlash™ Lives Up to the Hype for Asset Finance Software Provider

# IntelliFlash



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International Decision Systems (IDS), a provider of software and consulting services to more than 250 customers in thirty-four countries, knows something about risk and how to minimize it as a provider of software and services for the asset finance market. Its client roster includes nearly half of the largest leasing companies

in the United States, as well as a variety of other financial services clients, so the company understands that its clients are in the business of doing business, not running information technology data centers.

## The Challenge: Poor Performance in A Virtualized Environment

The data center servers at IDS are nearly 97% virtualized. Storage was very traditional: direct-attached storage and legacy-networked storage. Despite the very high percentage of virtualized servers, IDS was seeing storage-based performance issues and needed greater capacity, says Craig Debban, Global IT Director of IDS.

Despite multiple visits from the vendor's engineers and support team, Debban says the configuration of the system never quite seemed to be right. "For years, we suspected our existing storage systems wasted performance and were not configured correctly," he says. "And for years, the vendor said the problem was our network."

## The Solution: Tintri IntelliFlash

When IDS went looking for ways to improve its own data center's capabilities, it looked for partners that understood its goal was to improve productivity, not add technology for technology's sake.

Initially the company looked at more storage based on traditional rotating disk drives that would upgrade the existing enterprise-class disk systems, Debban said. A leading contender proposed replacing their existing storage, and made a convincing case for its offering. However, while the upgrade would be an improvement, it would have been only incremental, he added,

But that wasn't the only contender for the company's storage needs. The evaluation also included other major storage providers. However, one focused simply on virtual machines (VMs), and did not meet IDS's IOPS needs, and IDS could not justify spending what another bid for an all-flash system. IDS still was not sold on a hybrid system.

A former vendor's representative that Debban knew suggested that he consider IntelliFlash's flash-optimized approach. During the briefing on IntelliFlash, he said, the sales staff told him he should expect storage capacity savings ranging from 40 to 50% courtesy of the real-time deduplication and compression capabilities built in to the IntelliFlash system. While wary of hyperbolic sales pitches, Debban says he considered this as part of the overall benefits being offered.

## The Results: Simplified Management and Improved Performance

Since installing IntelliFlash earlier this year, Debban said performance benefits have lived up to the hype. In fact, rather than seeing a 50% improvement in storage performance after installing the first system, the actual results were closer to 75%, he says. For that reason the company quickly expanded its hybrid system with the two additional shelves of flash and disk.

The company is storing nearly 18TB of data on the IntelliFlash hardware, but data deduplication and compression is reducing that footprint to just 4.58TB. In addition, cloning time on the

## Challenges

- Poor performance in a virtualized environment
- Legacy storage systems not performing as expected

## Solution

- Tintri IntelliFlash

## Results

- Easy storage administration has eliminated the high cost of training employees
- Noticeable improvements in performance
- Reduced the time it takes to create clones— from 30 minutes to 2-3 minutes
- 75% reduction in primary storage footprint— from 18TB to 4.58TB



**Tintri**  
Intelligent Infrastructure

company's virtual machines has gone from approximately thirty minutes to about two or three minutes, said Chris Pahl, Senior Systems Engineer at IDS. "We are currently seeing 74.43% savings in our data and I expect that number to go up as we add more servers. We are not sure how to quantify the performance gain other than we went from people noticing slowness to it no longer being an issue at all."

The dramatic increase in performance did not require any changes to the existing network, Debban said. Despite the claims of the previous storage supplier, the IDS network was able to absorb the impressive performance increase without requiring any reconfiguration. Debban said he does not know if it was due to a properly configured storage system or the flash technology, but "with IntelliFlash, the performance problems are gone."

The benefits, however, were dramatic enough to show management that the initial pilot purchase should be expanded. "It took some months for (the IDS CFO) to finalize the initial purchase" of the IntelliFlash storage system, Debban said. "It took two weeks to buy another tray." Considering that the new systems include the CPU, RAM and storage, he added, "We can build upon this framework for years to come."

IDS' computing environment includes VMware and VMware Horizon View™. Its Windows-based systems are running Oracle and SQL Server. Most of that environment, including the Linux servers, is used to test the software the company develops, said Pahl. The IntelliFlash system is connected using a mix of 10GbE and 1GbE running both iSCSI and NFS protocols. Rounding out the data center are Nexus switches, as well as Cisco Unified Computing System (UCS) blade servers and Dell servers.

One important consideration for purchasing a new storage environment was ease of use. Although IDS is an international company with offices and data centers around the world, the IT team at the Minneapolis, MN headquarters office is only five people. As a result, it is important that the storage environment require only a generalist to be able to maintain the systems.

"Some vendors require that storage engineers get special training on the storage devices that can take up several days of training and a significant financial investment," said Pahl. For example, at the company's data center in India, training on the existing storage systems requires a two-week course for three employees. If one of those employees leaves the company, another employee would be required to take the same course in order for the data center to be fully staffed. That is not required with IntelliFlash flash and hybrid systems, he said. The systems are easy to learn and maintain. "Eliminating the high cost of training employees and maintaining that training when staff turns over is one of the top three benefits of moving to IntelliFlash," Debban says.

"The IntelliFlash storage environment has other benefits that go beyond simply improving the performance of the data center," Debban added. It also can provide a competitive selling point that benefits not only IDS' financial services clients with increased data security, but also could provide more US-based jobs. The IT savings from moving to IntelliFlash allows the company to reconsider a pending, major investment overseas. IDS currently is considering building a new data center in India. "The price of land in Bangalore, India, is competitive to the price of land in Minneapolis," he said. "By building the new data center in the United States rather than offshore, the company's corporate IT team can have greater control of the data security of the facility."

"Reducing infrastructure costs will make the US data center cost-competitive with the facility in India. This was an unanticipated benefit that not only can improve the performance and security of the data center infrastructure," Debban said, "but also makes maintenance and support easier. It also provides sales with a competitive advantage offering of ensuring clients that their data never leaves the shores of the US."

"While we have never lost a customer simply because our data centers are overseas," he says, "having a US-based data center is more attractive to US-based customers, especially in the banking industry."

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*Craig Debban, Global IT Director, IDS*

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



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