



Storage Virtualization at Total Wine & More

Background

Total Wine & More

Total Wine & More is the largest privately-owned fine wine retailer in the United States, with 62 stores in 11 states.

Total Wine needed a way not only to grow in terms of the size of the user community it supported but in terms of performance, simultaneously. According to Todd Slan, director of technology, Total Wine & More, DataCore has given his team the best way to do this – as well as the most cost-effective one. “With DataCore we are not wasting space as we had done in conventional SAN models,” he explains. “That is what we had relied on before and we were essentially wasting fifty percent of our disk space.”

Benefits

- Greater ability to accommodate growth
- Increased performance
- Better staff productivity
- Improved data protection
- Higher reliability

For more, visit:
<http://www.totalwine.com>

Total Wine & More (“Total Wine”) now relies on DataCore storage virtualization software as the backbone for its virtualized IT environment. Total Wine has deployed DataCore software to virtualize storage, enhance their EMC SAN investment and add high-availability for Microsoft Hyper-V platforms. By virtualizing its storage with DataCore SANsymphony™, Total Wine has met its business and performance objectives.

Challenge: Leveraging an Existing EMC SAN

Total Wine has seen enormous success in virtualizing the EMC storage area network (SAN) that was already deployed in its data center with DataCore storage virtualization software. The impetus for bringing DataCore in to virtualize and manage the SAN was straightforward – the SAN was running out of capacity and performance. “It got to the point where performance became an issue and we were out of disk space and we could not add more disk array enclosures unless we bought a new SAN,” notes Todd Slan, director of technology, Total Wine. “So, the idea of a storage virtualization solution like DataCore that enabled us to enhance our existing SAN solution and at the same time accelerate performance was the path we started down.”

Total Wine evaluated adding to the EMC SAN or going with other storage hardware solutions such as LeftHand Networks, EqualLogic as well as NetApp. However, in his role as Chairman of the Mid-Atlantic CIO Council for Microsoft, which serves as the executive advisory board, where he sits on the International Board, Slan was swayed to DataCore by another council member, who was a DataCore customer as well as partner. “DataCore and Microsoft partner The Asbury Group Integrated Technologies brought me into their data center and showed me how they solved an 80 terabyte problem with storage virtualization software from DataCore,” adds Slan. “That and the idea of not having to rip and replace our



existing investment in storage devices was enough to sell us on DataCore as the right solution for us as well.”

According to David Herr, chief technology and security officer, The Asbury Group Integrated Technologies, “Virtual servers and desktops depend heavily on shared disks. Without them, system administrators cannot migrate virtual machines, fail-over workloads or start up sessions on a completely different desktop. That is where DataCore comes in.”

Solution: A Flexible, Software-based, Total Virtualization Environment

Total Wine has a significant investment in Microsoft Hyper-V for virtual servers and has deployed Hyper-V exclusively as its virtual server of choice. Total Wine’s data center in Maryland is approximately 50% virtualized. Currently eight major systems or one-third of the virtual machines (VMs) in the virtualized infrastructure are now running on DataCore to virtualize and accelerate their storage. This will grow substantially in the next phase of the virtualization deployment.

Initially, Total Wine deployed DataCore simply to achieve the inherent benefits of virtualization for its EMC SAN, including better performance via DataCore’s “mega” caching functionality and increased capacity through its infrastructure-wide thin-provisioning technology. Slan and his team at Total Wine are now deploying a second DataCore license, to ensure high-availability and improve uptime. This summer, Total Wine’s DataCore virtualized-powered storage infrastructure will be fully redundant, whereby two mirrored SANs will safeguard the data – guaranteeing uptime and fault-tolerance. This will also lay the groundwork for full disaster recovery (if needed), whereby at a later stage a third DataCore SAN can be added in a remote location and connected via remote or asynchronous replication.

For more information on storage virtualization, please visit:
www.datacore.com

Slan emphasizes that in the retail world, sales margins are thin and that resource utilization is crucial to the retail model. “If we are under-utilizing our resources then in a sense it is wasted money. In terms of resource utilization, we can get over 80% utilization of our storage investment with DataCore. Make no mistake about it – the attraction to DataCore for us was that it is not a hardware device-based SAN solution. The software-based approach of DataCore was absolutely ‘key’ for us. Hardware is hardware. The bottom-line for us is that DataCore allows us to do a lot of the things we already knew were possible in the virtualization world, but with storage.”

Results: Meeting Business Objectives – Growth and Performance

The data pool that is now managed by DataCore is now totaling 10 TBs. In terms of the user community, that is divided between 230 users at total Wine’s Corporate Headquarters as well as employees working at the retail stores. For the corporate users, DataCore is providing the range of data, databases and servers you would expect to be relied on heavily in an office environment – flat files, databases, Exchange, etc. For those working in the stores, the core line-of-business application that runs Total Wine’s entire business operations “back-ends” to a SQL database that sits on the DataCore SAN.

“For our stores we had two issues,” explains Slan. “One was a growth issue. We took a database application that was serving 200 users in the corporate office and extended that to the field – bringing an additional 1,500 users under that umbrella. A conventional SAN, not using virtualization, has pretty serious physical size limits – and when you hit them, you hit them hard. DataCore solved this problem – and we did not have to buy more hardware, re-provision disks or resize LUNs. Apart from the growth issue was the performance one. The performance issues associated with having 1,000 users hit a database – as opposed to 200 – are significantly different. We had to have a solution that enabled us to crank up the performance of those databases. DataCore virtualization has delivered for us on the performance front as well.”

One of the things Slan and his team really love about the storage virtualization solution from DataCore is that it empowers them with flexibility. Today Total Wine has a mix of storage under management – fiber channel, direct-attached and iSCSI. “DataCore does not tie us into any one storage model,” Slan notes. “I don’t need to buy fiber channel storage for everything, and DataCore accommodates that. I can buy lower cost storage. I can hang direct-attached SAS units off the back of the DataCore SAN and I do not have to pay the fiber channel costs – because I don’t need it.”

