

CASE STUDY



VISIONEER ACCELERATES VIRTUALIZED APPLICATION PERFORMANCE WITH ViSX

"We have a corporate initiative to transform our entire IT environment with VMware; Astute is helping us make our virtualization strategy a reality. The ViSX Storage Appliance is an essential component of our strategy."

Walt Thinfen
VP, CIO Visioneer



Overview of Visioneer

Visioneer, based in Pleasanton, California, is a world-class developer of intelligent imaging solutions that provide a faster and easier way to capture documents and photographs and integrate them with popular document imaging applications. Visioneer and Xerox branded products provide a family of hardware solutions for the distributed and desktop scanner markets as well as the mobile and remote business scanning and storage segments. Visioneer has a solution for everyone, from the home and small office user to corporate and department workgroups, allowing them to be more creative, communicate more effectively, and increase productivity.

IT Environment

Visioneer has moved its HP servers to nearly a 100% virtualized server environment with VMware vSphere 4.1. Servers are connected to EMC VNX primary storage and to the Astute ViSX VM Storage Appliance via an HP-powered iSCSI SAN. Visioneer is an SAP shop, and also relies on Microsoft applications such as Exchange and Forefront.

IT Challenges

Visioneer had a corporate initiative to transform its entire IT environment with VMware with the goal of consolidating servers to lower overall IT costs. But, like many companies transitioning Tier 1 applications to virtualized environments, Visioneer ran into performance issues. According to Walt Thinfen, CIO and Vice President of Visioneer, "We virtualized all of our servers and then started to run into some performance issues for our SAP implementation. For people processing SAP orders, they could have gone to get a cup of coffee after hitting 'save.'" This was slowing critical business processes and impacting the operations of its partners and customers worldwide. They found the customary practices of increasing virtual machine resources, adding RAM, shifting reporting schedules, and time-consuming manual performance tuning to be ineffective. SAP responsiveness remained slow and this significantly reduced productivity. An in-depth analysis revealed existing virtualized datastores were the problem—they could not deliver the performance demanded by the SAP virtual machines.

VMware virtualization had reduced total costs of ownership (TCO), but it also increased storage workloads to levels well beyond what could be delivered by Visioneer's enterprise. Yet, expensive SAN upgrades or a disruptive SAN replacement were not possible due to budget constraints and service level agreements, where downtime is not an option. Additionally, due to the load on the legacy storage systems, backups began taking more than 24 hours, potentially putting data availability at risk.

IT Solution

Visioneer began searching for a VMware performance solution that was affordable, simple and effective ...one that would complement, rather than replace, their existing virtualized infrastructure. IT management discovered the innovative ViSX VM Storage Appliance by Astute, which was introduced to them by an Astute partner.

The technology experts at Visioneer requested a ViSX VM Storage Appliance for evaluation and performed a broad variety of tests using industry standard benchmarking tools such as Iometer. Visioneer's test results showed the flash-based ViSX VM Storage Appliance delivered 1,500% faster read performance than their existing enterprise SAN system. They found that while their SAN and NAS systems are capacity optimized, ViSX provides a performance optimized alternative for performance-sensitive mission critical applications.

ViSX Deployment and Results

First deployed in 2011, Visioneer connected the ViSX appliance in a matter of minutes to its standard Ethernet local area network via the iSCSI protocol. Visioneer used Storage vMotion to move their SAP virtual machines to the ViSX appliance without interrupting on-going operations, and increased SAP performance to their highest levels ever. They began to experience increased SAP responsiveness as each Storage vMotion migration completed; and their SAP performance issues were completely resolved within hours.

Visioneer's next step was to analyze the performance benefits to their SAP databases. Even prior to using the analysis tools included with SAP to measure before and after database speeds, Visioneer noticed an obvious improvement. The SAP performance monitoring tools reported key performance indicators (KPIs) for database speed were now up to 295 times faster.

Some of the key benefits of the Astute ViSX deployment at Visioneer

Astute ViSX Evaluation
Demonstrates 1,500% Faster
Reads

"The difference in performance between our enterprise SAN system and the ViSX appliance was far more than we expected," said Walt Thinfen, CIO and Vice President of Visioneer, it was amazing to see 15x faster performance from such a low cost product."

Non-Disruptive ViSX
Implementation

Walt adds "Virtual machine and application performance has been optimized with no impact to our existing infrastructure. The SAP performance improvements continue to benefit Visioneer in many ways. Productivity and efficiency is up as well, because our employees can now quickly access SAP like never before."

Fastest SAP Database
Performance Ever. Visioneer now
has the performance they need to
support future SAP needs

"After Visioneer deployed its first ViSX product into production, we witnessed a noticeable increase in the responsiveness of our database applications," remarked Walt. "Our database access times are now so fast that we don't expect to see SAP performance issues due to slow datastores again."

Backup windows are back to sub-
24 hour periods

Walt goes on to say: "ViSX also allowed backups to complete faster and with less impact on our other operations."

When asked if he would do anything differently, Walt remarked that "If I knew then what I know now, I would have implemented the ViSX storage much sooner".

Summary

By adding a purpose-built ViSX Flash VM Storage Appliance to its virtualized environment, Visioneer now has access to a performance-optimized datastore providing the sustained random IOPS equivalent of 1,000+ enterprise hard disk drives. Plus, the ViSX appliance is seamlessly integrated into Visioneer's VMware virtualized environment and works with their existing and future VMware and VMware Ready products. Visioneer is now enjoying these ViSX benefits:

- Improved SAP productivity to complete business processes on-time
- Eliminated expensive storage upgrades and disruptive SAN replacements
- Lowered total cost of ownership (TCO) for their VMware virtualized environment
- Increased sustained random IOPS performance for other virtual machines and applications
- Offloaded primary storage systems so backups complete on time