

## CASE STUDY

# VOLVO CES DEPENDS ON VISX TO SOLVE ITS VIRTUALIZED APPLICATION PERFORMANCE CHALLENGES

*"On our old system, a report that took 5 minutes to finish, takes 20 seconds on our ViSX appliance."*

Jeff Baldwin  
IT Manager, Volvo Construction Equipment



## Overview of Volvo Construction Equipment and Services

Volvo Construction Equipment is one of the world's largest manufacturers of construction machines, with a full product range serviced and supported by local dealers such as Volvo Construction Equipment & Services (VCES). VCES is a California based dealer based in Corona. VCES has been serving the needs of construction equipment customers for nearly 50 years. They have 6 branches across California- San Diego, Sacramento, and San Francisco Bay area, Fresno, Bakersfield and Corona.

## IT Environment

VCES runs exclusively on Dell MS-Windows servers, with all but one application virtualized under VMware vSphere 4.1. Servers are connected to the Astute ViSX VM Storage Appliance via an Ethernet switch running the iSCSI protocol. VCES runs its business applications including Microsoft applications such as Exchange and SharePoint on its flash-based ViSX appliance. VCES' backup solution is supplied by Veeam, to an on-campus site, to a rotating media (disk) system.

## IT Challenges

VCES moved from an outsourced IT service to a completely in-house IT organization in 2011. The objective was twofold: to dramatically decrease IT expenses and to improve business-critical application performance. Virtualizing applications was considered a key component of cost savings, and any solution selected had to work seamlessly with vSphere.

## IT Solution

VCES evaluated different vendors and eventually settled on a Dell based solution. For storage, Dell proposed an EqualLogic array, but the ViSX appliance was selected because according to Jeff Baldwin, IT Mgr, he wanted "solid state, because I needed speed". He goes on to say that "we could have gotten a hybrid system with rotating media and flash cheaper, but we wanted something fast, with predictable performance, and reliable".

## ViSX Deployment and Results

First deployed in late 2011, VCES connected the ViSX appliance in a matter of minutes to its Ethernet switch via the iSCSI protocol. VCES used Storage vMotion to move its datasets to the ViSX appliance.

### Some of the key benefits of the Astute ViSX deployment at Volvo CES

Fast application performance	“Jeff Baldwin, IT Mgr says that “On our old system, a report that took 5 minutes to finish now takes 20 seconds on our ViSX appliance.”
Non-Disruptive ViSX Implementation	Jeff mentions that “I created the volumes, copied the datasets, and that was it.”
Fast ROI	Jeff and his manager, Charles Balmes, Chief Financial Officer, both claimed that “By moving data processing in-house, using Dell servers, an Ethernet SAN, and the ViSX appliance, we saved a ton of money. We paid for all the new equipment in three months.”
Fast, out-of-the box installation	Jeff reports that “I installed it in 10 minutes”.
Trouble-free use	Jeff says that “I haven’t touched it since we installed it. It’s been on autopilot for a year. It just runs.”
Easy, reliable HA solution	According to Jeff: “The biggest reason to have everything on VMs is that I can do minute-level or hourly-level snapshots, and pick and choose where I would need to restore from. If needed, I could run the VMs from the backups at whatever restore point is available.”

## Summary

By adding a purpose-built ViSX Flash-based Performance Storage Appliance to its newly virtualized environment, VCES now has access to performance-optimized datastores that provide consistent high performance. The ViSX appliance is seamlessly integrated into VCES’s VMware virtualized environment and works with their existing and future VMware vSphere and VMware Ready products, like Veeam Backup and Replication. VCES is now enjoying these ViSX benefits:

- Improved performance across all applications
- Lowered total cost of ownership (TCO) for IT infrastructure vs. the prior use of offsite IT services

IT is freed up from time managing storage to pursue other initiatives that promise a better ROI than managing and troubleshooting storage arrays with inconsistent and unpredictable performance.