Drobo Solution Summary

Do your Servers have Advanced Enlightenment?

Affordable DroboElite™ shared storage enables SMBs to reach a Zen state
for application HA with Citrix® XenServer® Advanced Edition

Highlights

iSCSI SAN for maximizing the value of server virtualization and Citrix XenServer

Gives small enterprises and departments application High Availability starting under $10K

Storage and virtualization (Advanced Edition) designed especially for SMBs

Flexibility and freedom to move VMs between servers as well as automate HA

Easy & affordable storage growth with mix & match of drives

Citrix Ready certified, on HCL and supported for use with Citrix XenServer

Customer Challenge

Businesses of all sizes are receiving great benefits from virtualizing their servers. Saving money is an easy decision, which has made deploying free versions of server virtualization the most popular IT project in recent times, both for test/dev and in production. In addition to cost savings, virtualization also offers huge flexibility and availability benefits that help IT managers maintain service levels for their business managers. These features however have not always been affordably priced in a way where small businesses could use them in production.

Server virtualization also presents a new challenge for small businesses specific to storage. Shared infrastructure is required to connect all resources and enable motion and mobility of applications. Without shared storage, IT managers cannot move VMs within and between physical servers, and thus cannot use the power of virtualization to automatically move applications in the event of an issue. Historically only larger enterprises could afford the combination of SAN storage and Enterprise virtualization software to fully utilize mobility and high availability (HA) features.

The Solution

Affordable SAN and sever virtualization solutions have been designed especially for SMBs. This combination makes for an architecture that opens up tremendous flexibility. Business managers get the cost-savings they needs, while IT managers can move applications the way they want without impacting user access or uptime. This is a life-saver when it comes to maintenance; move a VM and application, perform maintenance, migrate back and the user never notices. This mobility can also be automated for a true HA solution for maximum uptime.

Citrix XenServer is the only virtualization platform that delivers all of the critical features needed for any server and datacenter virtualization implementation. With scalability for any size business, the low-cost Advanced Edition provides key HA and advanced management tools that take virtual infrastructure to the next level. Advanced Edition is priced at $1,000 and appointed on a per server basis, with upgradability in place via license key with no additional software installation or downtime required. With Citrix XenServer Advanced Edition and iSCSI SAN, easy and affordable HA is possible for SMBs and departments. For more information on XenServer editions, a comparison table is available @ http://www.citrix.com/xenserver/how-it-works/editions.
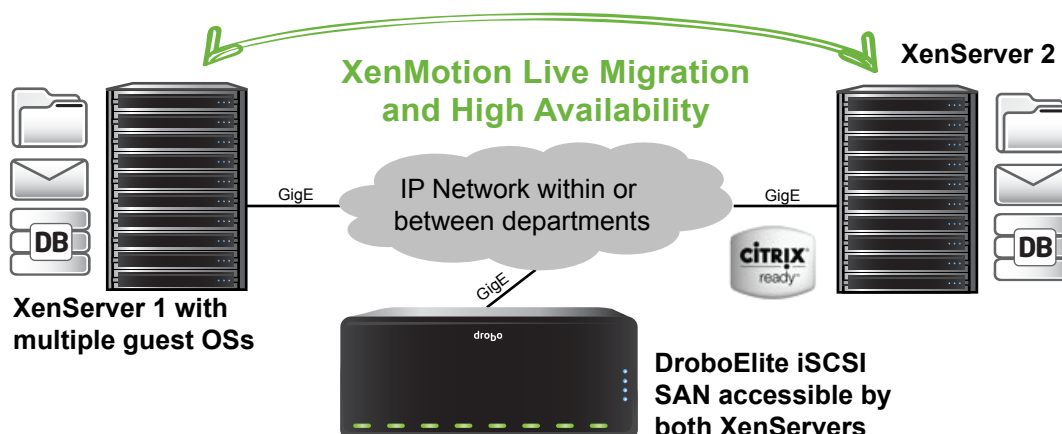
What You Will Need

Comparing entry-level iSCSI arrays, where the savings from DroboElite in comparison can pay for the Advanced Edition licenses for 3 servers so they benefit from HA capabilities.

What You Need	DroboElite	Simple-Start first-time SAN
1 x SAN Storage, 8TB w/3 yr maintenance	**29% savings**, aligned with SMB requirements and scale	Nearly $10,000 for entry array configuration, up to 16 servers
The Big Difference	**>$3K lower**, get software + storage for <$10K, savings pays for 3 server licenses	Higher cost to scale-up storage over time, locked-in to specific drives

How To Build It

Block Diagram of Citrix Ready certified solution with servers hosting multiple guest OSes and leveraging the High Availability capabilities of XenServer Advanced Edition connected to DroboElite SAN via iSCSI, where savings from DroboElite in comparison can pay for 3+ Citrix XenServer Advanced Edition licenses.

XenMotion Live Migration and High Availability

XenServer 2

GigE   IP Network within or between departments   GigE

GigE

XenServer 1 with multiple guest OSs

CITRIX ready

DroboElite iSCSI SAN accessible by both XenServers

High-level outline of steps, providing HA in a Citrix XenServer environment in a couple of hours

- Install DroboDashboard on management server (can be on a VM)
- If not already done, configure network to enable communication between servers & storage
- Deploy iSCSI SAN storage, easy 1-click setup w/ DroboElite, configure SmartVolumes

   Note – Minimum LUN size is 1TB per Smart Volume with DroboElite

- Recognize storage, finish storage configuration with XenServers and guest OSes
- If running Free Edition of XenSever, non-disruptively upgrade to Advanced Edition
- Use XenSever Tools to test and trigger XenMotion® and configure HA for automated failover

   Note – Currently unable to use XenServer Tools and high performance Windows drivers & management agent with DroboElite for live migration, offline migration supported. Support for live migration is scheduled for forthcoming DroboElite software update.
   Note – Support provided for Linux VMs that utilize paravirtualized (PV) drivers/kernel.

Where Drobo is Different

SAN storage is a must if you want to maximize mobility and availability for XenServer. Fibre Channel SANs have a high entry cost which prevents companies with smaller configurations and budgets from taking full advantage of XenServer. iSCSI can be lower in price, but many iSCSI arrays are still tens of thousands of dollars and expensive by most measures. Vendors will claim iSCSI arrays are easy to use and deploy, but most are built for large enterprises in mind.

DroboElite provides enterprise-class data protection with BeyondRAID technology, in a package that is designed for SMBs to be easy to use and affordable. Without the cost burden of storage built-in, customers can get the primary benefit of live migration between servers at a price they can afford. Several applications for data protection are available to combine with this foundation solution for even higher levels of availability and recovery. With Drobo, there is one less reason keeping you from reaching an enlightened "Zen" state of high availability for your applications with Citrix XenServer Advanced Edition.

More Information

Solution materials, including the webcast replay and Q&A with an expert guest @
http://www.drobo.com/resources/DBN-Virtualization-102610.php
Want to try it? Free 30-day evaluation @ **http://info.drobo.com/droboelite_free_eval**
Want to buy it? Ask your preferred reseller, or visit the where to buy page @
http://www.drobo.com/where_to_buy