



Is Your SMB SAN for VMware Small Enough?

Using affordable shared storage to maximize high availability and fault tolerance in VMware environments

Customer Challenge

It is generally accepted in the marketplace that businesses of all sizes receive great benefits from virtualizing their servers. The clear cost savings from reducing the number of physical servers is huge for business managers. Saving money is an easy decision, which has made deploying VMware the top project in companies who have 10 to 10 thousand users. Virtualization also offers significant flexibility and availability benefits that help IT managers.

Having the right infrastructure to support server virtualization helps save time and effort for IT. IT managers supporting everything IT at a small company really need these time and effort savings! As a bonus, IT and business managers experience improved service levels and greater availability of applications for everyone. Historically only larger enterprises could afford SAN storage and VMware editions to fully utilize mobility and high availability (HA) features built into VMware software. For millions of smaller organizations, cost has been a limiting factor.

The Solution

Shared SAN enables all vSphere servers to see the same storage, enabling movement of VMs and applications across redundant infrastructure. This architecture opens up tremendous flexibility and IT managers can move applications 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--without users even noticing. Without SAN, VMs are limited to one physical server and direct-attached storage and are subject to downtime for maintenance or extended downtime in the event of a failure.

VMware vSphere 4.1 Essentials Kits are all-in-one solutions that combine virtualization for up to three physical servers (up to two processors each) with centralized management capabilities. The Essentials Plus Kit provides the same enterprise fault tolerance usually affordable only for larger organization, but for smaller organizations. You can upgrade from the Essentials Kit to Essentials Plus to get vMotion, High Availability, and Data Recovery capabilities. The Essentials Plus Kit and an iSCSI SAN make easy and affordable HA possible for SMBs and departments.

Highlights

- iSCSI SAN for maximizing the value of server virtualization and VMware
- Gives small companies and departments High Availability starting at under \$20K
- Storage and virtualization (Essentials Plus Kit) designed especially for SMBs
- Flexibility and freedom to move VMs among servers and storage devices
- Sophisticated backup and protection with VMware Data Recovery
- VMware vSphere 4.0 Certified Solution from Drobo®

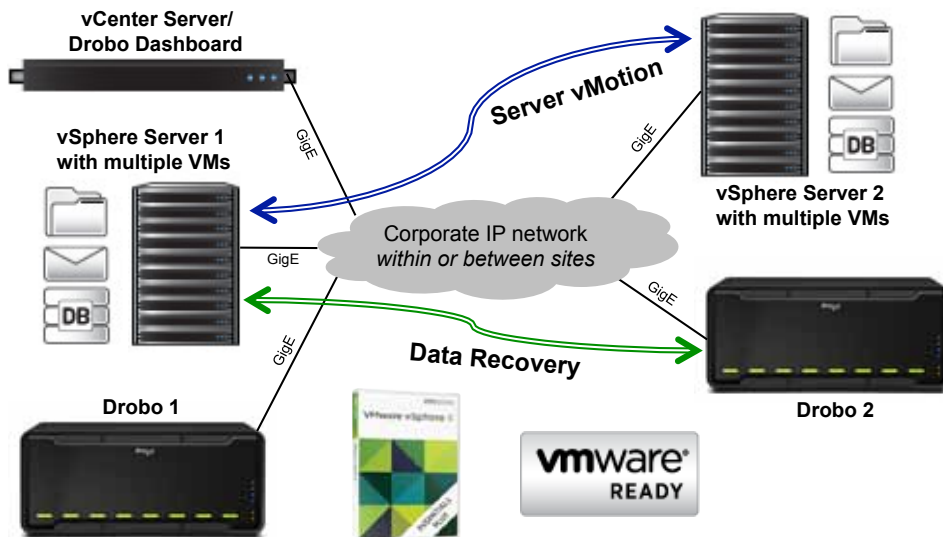
What You Will Need

Comparing entry-level iSCSI arrays to see that the savings from Drobo can pay for the VMware vSphere Essentials Plus kit (\$5,723.70 with 3 year support as of 2/1/2011) for HA capabilities.

What You Need	Drobo 8-bay SAN Storage for Business	Simple-start First-time SAN
2 x SAN Storage, 8 TB each w/ 3yr maintenance	34% savings , aligned with the 3 server configuration in VMware kit for SMBs	Nearly \$20,000 for 2 arrays in entry configuration, up to 16 servers
The Big Difference	> \$6K lower , get software + storage for < \$20K, flexible drive choice	Higher cost to scale-up storage over time, locked-in to specific drives

Drobo Solution Summary

Certified solution with virtualized Windows servers leveraging vSphere Essentials Plus capabilities connected to Drobo 8-bay SAN storage for Business via iSCSI (note that Storage vMotion requires an Enterprise license).



Where Drobo is Different

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

Drobo provides superior data protection with BeyondRAID™ technology, in an easy-to-use and affordable package especially designed for SMBs. Without the cost burden of features that are already built into vSphere and the Essentials Plus Kit, customers can buy the two iSCSI SAN arrays needed for DR and fund the Essentials Plus Kit for less cost than other entry solutions—at less than half the cost of most enterprise iSCSI arrays. With Drobo, there is no reason you cannot reap the benefits of a highly available virtualized environment, get HA!

More Information

Find solution materials, including a webcast replay 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/free_eval

Want to buy it? Ask your preferred reseller, or visit http://www.drobo.com/where_to_buy

How To Build It

To provide HA in a VMware environment in one working day:

1. Install Drobo Dashboard on management server (can be on vCenter server or a VM).
2. Deploy iSCSI SAN storage, easy one-click setup with Drobo, configure SmartVolumes.
3. Rescan to recognize storage, finish storage configuration with VMs.
4. Configure network to enable communication between servers (can be done in advance).
 - a. When running Essentials 4.1 kit only, upgrade to the Essentials Plus 4.1 kit within vCenter
 - b. With just ESXi or free hypervisor, implement Essentials Plus kit, just (\$5,723.70 w/ 3yr).
5. For additional capability of Storage vMotion, vSphere Enterprise edition is required.
6. Click in vCenter to test and trigger vMotion, you have High Availability!

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SU-0019-01 • April 2011