



## Is Your SMB SAN for VMware Small Enough?

### Using affordable yet sophisticated shared storage to maximize high availability 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. Expertise notwithstanding, every IT manager at a small company can benefit from 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 the VMware licensing 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 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 organizations, just 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
- VMware vSphere Certified Solution from Drobo®
- Detailed how-to guide available on the VMware Solution Exchange

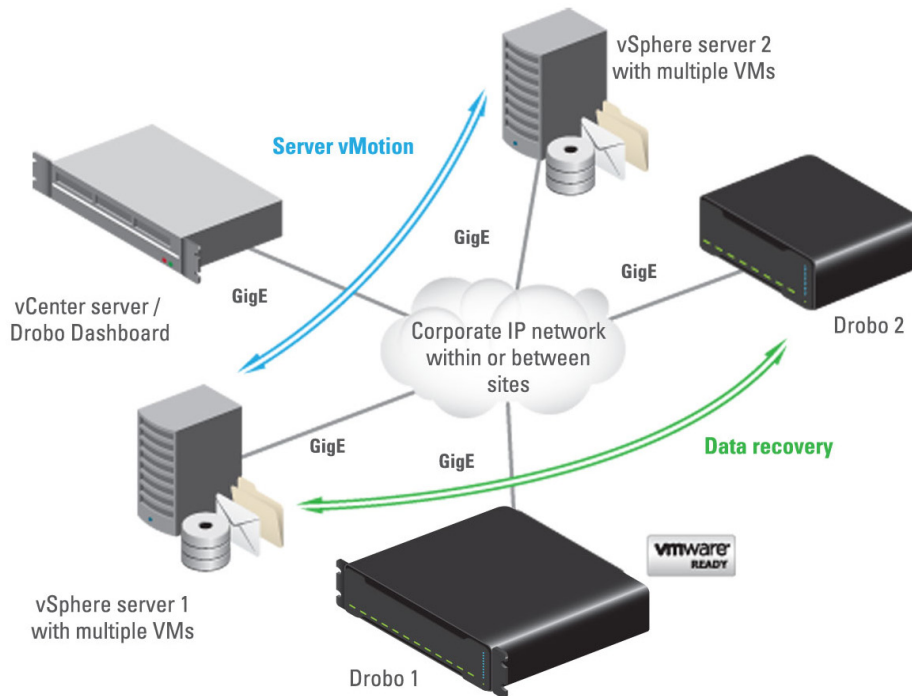
#### What You Will Need

Comparing iSCSI arrays to see that Drobo provides both capacity and performance for VMware, and the savings from Drobo can pay for the VMware vSphere Essentials Plus kit (\$7,462.36 with 3-year 24/7 support as of 8/20/2012) for HA capabilities.

What You Need	Drobo 12-bay SAN Storage for Business	SMB Next-Gen GbE iSCSI SAN Arrays
2 x SAN Storage, min of 8/12 TB each with 3-year support	<b>Less than half the cost</b> , aligns with 3-server configuration in VMware SMB licensing	> \$26K for each array in entry configuration, up to 16 servers
The Big Difference	<b>&gt; \$10K lower</b> , get software + storage + servers for less than the storage alone	Higher cost to scale up storage over time, locked into specific drives

# Drobo Solution Summary

Certified solution with virtualized servers leveraging vSphere Essentials Plus capabilities connected to Drobo 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 several tens of thousands of dollars for each system and considered high cost 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 easy-to-use and affordable packages that are designed especially 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—or less than half the cost of most enterprise iSCSI arrays. With Drobo B1200i, you can also leverage SSDs with HDDs for capacity and performance in the same system, accelerating your VMs. With Drobo, there is no reason you cannot reap the benefits of a highly available virtualized environment.

## More Information

Find solution materials, videos, and webcast replays with expert guests

@ <http://www.drobo.com/vmware>

**Compare the B1200i to HP or Dell?** Try the interactive calculator @ [www.drobo.com/dothemath](http://www.drobo.com/dothemath)

**Want to talk about it?** Live experts from Drobo @ [www.drobo.com/live](http://www.drobo.com/live)

**Ready to buy?** Ask your preferred reseller, or visit [www.drobo.com/where-to-buy/index.php](http://www.drobo.com/where-to-buy/index.php)

## 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 Smart Volumes.
3. Rescan to recognize storage, finish storage configuration with VMs.
4. Configure network to enable communication between servers (can be done in advance).
5. If running Essentials kit only, upgrade to the Essentials Plus kit within vCenter
  - a. With just ESXi or free hypervisor, implement Essentials Plus kit, just (\$7,426.36 w/ 3-year 24x7 support)
  - b. For the additional capability of Storage vMotion, vSphere Enterprise edition is required.
6. Click in vCenter to test and trigger vMotion, you have mobility and HA!

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