

# Drobo Solution Summary



## Crushing data without crushing your budget

Optimizing your SMB backup strategy using DroboElite™ for disk-based backup and Symantec Backup Exec 2010 Deduplication Suite

### Highlights

Disk-based backup solution with dedup using technology designed for small business

Gives small businesses backup deduplication for half the cost of appliance deduplication

Faster backup and recovery with disk vs. tape by eliminating tape media loading and positioning

Provides iSCSI SAN that can be used for primary storage as well, supporting VM mobility

Flexibility to run deduplication on backup server and on selected client systems

Integrates with deduplication appliances as the environment scales from small to medium

### Customer Challenge

Backup is not fun and no one is really happy with their backup strategy. This is especially true for smaller organizations that have a desire for faster backups, smaller backup windows, and faster recovery. The most popular architecture for backup for the past several years has been backup to disk versus directly to tape. Going by the name disk to disk, D2D, and B2D among others, disk backup eliminates tape media loading and positioning resulting in faster backup and recovery. Small companies do not have the budget to invest in the same technologies and approaches to backup used by larger organizations.

Tape continues to be part of the strategy for offsite protection and long-term archiving, and for many small businesses, is their only strategy because of its lower entry cost. With new technologies like data deduplication or dedup, the amount of data stored on disk can be drastically reduced. A small amount of disk can now store the same amount of backup data that tapes with 2:1 compression can store making the total cost of disk lower than tape in addition to all of the other benefits. While disk continues to increase in capacity and decrease in price, backup to disk with dedup is still a paradox as small businesses know they want it to save money but cannot afford the minimum investment to start taking advantage of the benefits.

### The Solution

It starts with shared storage. Building a storage pool that can be accessed by the backup server(s) in the environment allows for the cost of disk storage for backup to be shared across multiple applications for both primary and secondary storage. Small businesses also need this shared storage in order to achieve high availability for virtual servers. Use deduplication to eliminate redundant data to make backup to disk as cost effective as tape alone. Only one unique instance of the data is actually retained on storage, and redundant data is replaced with a pointer to the unique data copy.

With recent developments and innovations, there are new dedup options integrated in backup software suites that lower the entry cost of dedup. Using the media server that is already required for backup, dedup can be performed for all of the clients in a central way, with no added complexity. For client systems with the right resources (CPU, RAM), dedup at the client can also reduce LAN traffic between the clients and backup server. Combining media server dedup with client dedup on select systems solves the paradox, making for a cost effective solution that small businesses can afford to buy so they can start saving. Investments in tape continue to be leveraged for offsite and archiving.

### Comparing Alternatives

Comparing approaches to deduplication where DroboElite provides the most simple and affordable solution for disk-backed backup. Client/Source Deduplication is only available for Windows Agents (Exchange, Agent for Windows, SQL Agent, etc.)

Criteria	Media server dedup	Client dedup	Dedup appliance
Backup data reduction	Good	Good	Very Good
Network traffic reduction	From backup server to SAN	From clients to backup server	From backup server to SAN
Client CPU impact	Lower	Higher	Lowest
Entry cost	\$	\$	\$\$\$-\$\$\$\$

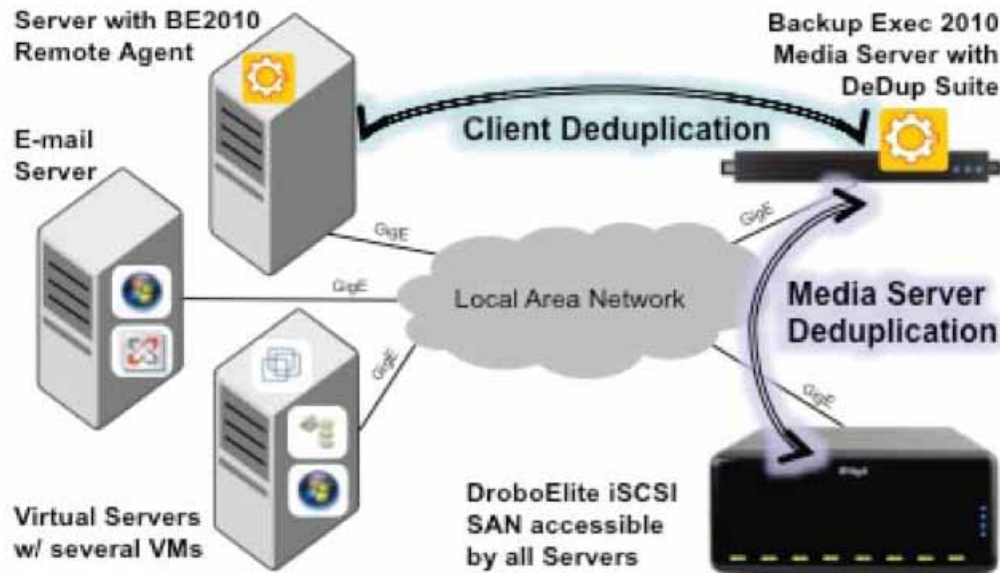
### What You Will Need

Comparing SMB solution alternatives. Note - x64-bit media server (one quad-core or 2x dual-core processor, 8-16Gb physical memory) required, a dramatically lower cost investment than the lowest-cost appliances that start at \$12,500, and continue over \$20,000 just for the appliance.

What You Need	DroboElite with BE2010	Min-config dedup appliance
iSCSI storage for disk backup plus dedup software / hardware	<b>50% lower cost</b>	>\$25,000 for solution with storage and software
The Big Difference	<b>&gt;\$13,000 lower</b> , same benefits for small environment	No strong difference for SMBs compared to using media server

## How To Build It

Block Diagram of certified deduplication solution with Symantec Backup Exec 2010



### High-level outline of steps, disk-based backup w/ deduplication before your next backup window

- Install DroboDashboard on management server (can be on backup server)
- Deploy SAN storage device, easy 1-click setup w/ DroboElite, configure smart volumes
- If not yet installed, install Backup Exec 2010 on media server
  - For clients where you want to use client dedup, install client software
- 3 easy steps to enable deduplication with Backup Exec 2010
  - Install option, define dedup location, target backups
- Run a backup with dedup and test the restore, you are now doing disk backup with dedup!
- Bonus - look at adding resiliency and HA using DroboElite for virtual server mobility

### Where Drobo is Different

SAN storage is a must in order to consolidate storage for disk backup, enabling virtual machine mobility, or both. Everyone wants fast backup and recovery of data, but many do not have the choice to invest in what Enterprises are doing. SMBs don't have the budget for Fibre Channel SANs and deduplication appliances, and even the lowest-cost iSCSI storage and smallest entry-model deduplication appliances are expensive by most measures.

DroboElite provides superior data protection with BeyondRAID technology in a package that is very affordable. Without the cost burden of features built-in to the product, small customers have the freedom to combine best of breed technologies that are tailored to their needs. Combining DroboElite for disk backup and deduplication as a software element for their backup media server makes for a solution that is less than half the entry cost of the dedup that enterprise customers buy. The incredible ease-of-use is a huge plus!

### More Information

Solution materials, including the webcast replay and Q&A with an expert guest @

<http://www.drobo.com/resources/DBN-DataProtection-113010.php>

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