



ExaGrid®

Stress-Free Backup Storage

DATA SHEET

Gartner

ExaGrid Named "Visionary" in the
2014 Magic Quadrant for Disk Backup
with Deduplication Appliances



"Best-in-Class" Disk Backup Solution
in Under \$100k and Under \$50k
2013 Buyer's Guide Reports



ExaGrid Wins
"Disk Based Product of the Year:
Small/Mid-range" - 2014



InfoWorld.com Awards ExaGrid
"Technology of the Year - 2013"



ExaGrid Named 2013
"Disk Backup Champion"

There are many challenges with implementing disk-based backup with data deduplication.

If the deduplication is performed in the backup software, standard disk can be used on the back end but there is a trade-off with backup performance, restore performance and the cost of the disk and bandwidth over time.

A purpose-built target-side appliance with inline deduplication uses less overall disk; however, the inline approach slows down backups and slows down restores as only deduplicated data is stored. In addition, the backup windows expands as data grows, forcing an expensive forklift upgrade.

ExaGrid looked at the problem from a backup point of view versus a deduplication point of view. Instead of simply adding deduplication to the backup application or to standard storage, ExaGrid thought through the critical issues of backup performance, data restores, expanding backup window, scalability, and other backup-related challenges and designed a solution that meets all requirements. ExaGrid's unique landing zone and scale-out approach that uses full servers in a GRID is the best of all worlds.

DCIG 2014 Buyer's Guide

Midrange Deduplicating Backup Appliance Under \$100K

	DEDUPLICATING BACKUP APPLIANCES	SCORE	RANKING
1.	EMC Data Domain 2500	78.35	Recommended
2.	ExaGrid EX32000E	77.80	Recommended
3.	ExaGrid EX21000E	77.38	Recommended
4.	ExaGrid EX13000E	77.09	Recommended
5.	ExaGrid EX10000E	75.72	Excellent
6.	Dell DR6000	75.36	Excellent
7.	Hewlett Packard StoreOnce 4700	75.28	Excellent
8.	ExaGrid EX7000	73.94	Excellent
9.	ExaGrid EX5000	73.94	Excellent
10.	ExaGrid EX4000	73.10	Excellent
11.	ExaGrid EX3000	72.93	Excellent
12.	Dell DR4100	70.22	Good
13.	EMC Data Domain 2200	69.88	Good
14.	Hewlett Packard StoreOnce 4500	69.20	Good
15.	Quantum DXi6701/DXi6702	69.00	Good
16.	IBM Storage System TS7620 ProtecTIER Deduplication Appliance Express	68.60	Good
17.	ExaGrid EX2000	68.40	Good
18.	ExaGrid EX1000	66.90	Good
19.	NEC HYDRAsTOR HS3-410	66.65	Good
20.	EMC Data Domain 160	66.08	Good

EXAGRID™

ExaGrid: Stress-Free Backup Storage

Disk-Based Backup with Data Deduplication Comparison

	ExaGrid - Adaptive deduplication - Scale-out architecture - Landing zone	EMC Data Domain, DELL, HP, Quantum - Inline deduplication - Scale-up architecture	CommVault Simpana, Symantec NetBackup 5230 - Deduplication to disk - Backup application
Average Deduplication Ratio	20:1	14:1 to 20:1 Varies by vendor	Average 7:1 Uses the most disk and the most bandwidth
Backup Performance	Fastest Data writes direct to disk As data grows, additional disk target and bandwidth are added.	Adequate Deduplication is compute intensive and occurs during the backup, resulting in slower backups.	Slowest Deduplication is compute intensive and occurs during the backup, resulting in slower backups.
Fixed-Length Backup Window	Yes As data grows, additional processor, memory and bandwidth are added.	No Uses a fixed resource front-end controller and only disk is added as data grows.	No Utilizes the media server which becomes a bottleneck.
Fast Restores	Yes Most recent data resides in full unduplicated format in a Landing Zone for fast restores.	No All data is deduplicated and has to be rehydrated before a restore can occur.	No All data is deduplicated and has to be rehydrated before a restore can occur.
Fast Offsite Tape Copies	Yes Most recent data resides in a full unduplicated format in a Landing Zone for fast offsite tape copies.	No All data is deduplicated and has to be rehydrated before an offsite tape copy can be made.	No All data is deduplicated and has to be rehydrated before an offsite tape copy can be made.
Instant VM Recoveries	Yes Most recent VMs are in a complete unduplicated format in the Landing Zone and can be immediately booted.	No All data is deduplicated and has to be rehydrated before a VM can be booted. It can take hours.	N/A Feature may not be available with this approach.
Low Cost Scalability as Data Grows	Yes Scale-out model. Full server appliances are added into a GRID as data grows, adding compute with capacity.	No As data grows, the front-end controller falls behind and must be replaced with a bigger/faster front-end controller.	No Due to a lower deduplication rate, disk grows at a faster rate. Expensive to add both media servers and disk.
Rack Space	Average 3U per appliance	Average 3U per appliance	Uses media servers, disk or integrated appliances; U's vary
Power and Cooling	Average Uses more disk but cooler lower clock speed processes	Average Uses less disk but very hot higher clock speed processors	Average Depends on configuration
Price	Market leading	Depends on the vendor – some are market leading and some are overpriced	Cost of disk at four weeks or more of retention is more expensive due to lower deduplication ratios in backup software.