ExaGrid®
Appliance Product Line Configurations

High Performance Disk-Based Backup with Data Deduplication

ExaGrid's disk backup with deduplication system is the only solution purpose-built for backup that leverages a unique architecture optimized for scalability, performance, and price. The system scales as needed by adding ExaGrid appliances, which virtualize into a GRID architecture automatically, adding capacity and processing power while acting and being managed as one unified system.

ExaGrid disk-based backup appliances include GRID computing software, which virtualizes them into a single pool of long-term capacity. Capacity load balancing of all data across servers is automatic, and multiple GRID systems can be combined for a total logical backup capacity of more than 12PB. Only with ExaGrid's full server in a GRID architecture and adaptive deduplication do you get:

- Fastest backups and shortest backup windows with optimal recovery point at the disaster recovery site
- Fastest full system restore (from full backup copy on disk)
- Instant VM Recovery (with Veeam)
- No expansion of backup windows as data grows
- Seamless scalability as data grows with no forklift upgrades
- No obsolescence of previous model systems as data grows
- Protected data at rest with 256-bit AES encryption (encrypted models only); data is never in the clear on the disk storage using FIPS 140-2 Validated Self-Encrypting Drives (SEDs)

ExaGrid Model	Raw Capacity (TB)	Usable Capacity (TB)	Capacity for Weekly Fulls (TB)	Capacity for 16 Weekly Fulls (TB)	Max Backup Thruput (TB/hr)
ExaGrid Appliance Nodes					
EX1000	5	2	1	16	0.36
EX2000	7	4	2	32	0.36
EX3000	9	6	3	48	0.72
EX4000	11	8	4	64	1.08
EX5000	16	10	5	80	1.08
EX7000	20	14	7	112	2.40
EX10000E	26	20	10	160	2.40
EX13000E	32	26	13	208	2.40
EX21000E	48	42	21	336	4.32
EX32000E	72	63	32	512	7.56
ExaGrid Appliance Nodes with Encryption					
EX7000-SEC	20	14	7	112	2.40
EX10000E-SEC	26	20	10	160	2.40
EX13000E-SEC	32	26	13	208	2.40
EX21000E-SEC	48	42	21	336	4.32
EX32000E-SEC	72	63	32	512	7.56

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With ExaGrid disk-based backup appliances, backups are written directly to a disk landing zone, avoiding inline processing, ensuring the highest possible backup performance resulting in the shortest backup window. Adaptive deduplication performs deduplication and replication in parallel with backups while providing full system resources to the backups for the shortest backup window. Available system cycles are utilized to perform deduplication and offsite replication for an optimal recovery point at the disaster recovery site. Once complete, the onsite data is protected and immediately available in its full undeduplicated form for fast restores, VM Instant Recoveries and tape copies while the offsite data is ready for disaster recovery.

ExaGrid Model	Raw Capacity (TB)	Usable Capacity (TB)	Capacity for Weekly Fulls (TB)	Capacity for 16 Weekly Fulls (TB)	Max Backup Thruput (TB/hr)
Example GRID Configurations					
EX53-GRID	120	105	53	848	11.88
EX64-GRID	144	126	64	1,024	15.12
EX85-GRID	192	168	85	1,360	19.44
EX96-GRID	216	189	96	1,536	22.68
EX128-GRID	288	252	128	2,048	30.24
EX160-GRID	360	315	160	2,560	37.80
EX192-GRID	432	378	192	3,072	45.36
EX224-GRID	504	441	224	3,584	52.92
EX256-GRID	576	504	256	4,096	60.48
EX288-GRID	648	567	288	4,608	68.04
EX320-GRID	720	630	320	5,120	75.60
EX352-GRID	792	693	352	5,632	83.16
EX384-GRID	864	756	384	6,144	90.72
EX416-GRID	936	819	416	6,656	98.28
EX448-GRID	1,008	882	448	7,168	105.84

* Scales to 25 appliances in a scale-out GRID (800TB full backup / 187.5TB/hr.)

Simple, Turnkey Appliances

ExaGrid's disk backup appliances work seamlessly with the industry's leading backup applications, and the appliance typically installs in about one hour. The product line's multiple appliance models can be combined into a GRID configuration of up to 1.8PB raw capacity, allowing full backups of up to 800TB.

ExaGrid appliances are comprised of Intel® processors, enterprise SATA/SAS drives, RAID 6 with hot spare, and ExaGrid software. Since each appliance includes the appropriate amount of processor, memory, disk, and bandwidth for the data size, as each appliance is plugged into the switch and virtualized into the GRID, performance is maintained and backup times do not increase as data is added. This combination of capabilities in a turnkey appliance makes the ExaGrid system easy to install, manage, and scale.

Scalable GRID Architecture

Multiple core ExaGrid disk-based backup appliances include GRID computing software which allows them to virtualize into one another when plugged into a switch. As a result, any of the multiple appliance models can be mixed and matched into a single GRID configuration of up to 1.8PB raw capacity and allowing full backups of up to 800TB. Once virtualized, they appear as a single pool of long-term capacity. Capacity load balancing of all data across servers is automatic, and multiple GRID systems can be combined for additional capacity. Even though data is load balanced, deduplication occurs across the systems so that data migration does not cause a loss of effectiveness in deduplication.

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