



ExaGrid®

Cost-Effective Disk-based Backup™

ExaGrid is the only solution that satisfies all seven requirements of Cost-effective Disk-based Backup.

The 7 Requirements

1. Leverage existing backup applications and processes
2. Reduce nightly backup window
3. Enable fast and reliable restores utilizing a disk-based verified data approach
4. Eliminate tape management challenges through the use of disk and server technology
5. Provide efficiency through byte-level data deduplication technology
6. Co-exist with existing tape strategy
7. Supplement offsite tapes with a live disk-based data repository solution that satisfies all seven requirements of cost-effective disk-based backup

About ExaGrid

An Easy to Use Disk-based Backup Solution with Byte-level Data Deduplication

ExaGrid is a cost-effective and scalable disk-based backup solution that works with your existing backup application. ExaGrid combines high quality SATA drives, compression and data deduplication for fast and reliable backups and restores.

ExaGrid's innovative approach minimizes the amount of data to be stored by providing standard data compression for the most recent backups, along with byte-level data deduplication for all previous backups. ExaGrid's byte-level data deduplication technology stores changes from backup to backup instead of storing full file copies. This unique approach reduces the disk space required by at least 10, and up to 50 to 1, delivering unparalleled cost savings and performance all in a solution that is less than 30% the cost of standard SATA based storage.

Replace your Tape Library with the Lowest Cost Disk-Based Data Protection

Using ExaGrid's disk-based solution instead of tape can reduce an organization's backup window by 30% to 80%. A typical 12-hour backup window can be decreased to as little as four hours. ExaGrid increases the speed and reliability of your backups and also provides faster and more reliable restores. For off-site long term retention or disaster recovery, ExaGrid supports the ability to transfer backup data to an installed system at a remote location to supplement or eliminate off-site tapes. ExaGrid supports both two-site as well as multi-site topologies where multiple locations can transfer backup data to a centralized site for disaster recovery protection. The result is that all backup data is now stored in a live disk repository for rapid restores in the event of a disaster. ExaGrid is extremely cost-effective at transferring backup data off-site because the byte-level data deduplication technology only moves changes, requiring minimal WAN bandwidth. The costs associated with tape handling, shipment, and storage are significantly reduced or eliminated.

The ExaGrid System

The ExaGrid system is based on standard servers that are shipped along with ExaGrid's unique software to deliver a complete turnkey solution for disk-based backup. The ExaGrid system is rack-mountable and uses standard components, including Intel quad-core Xeon processors, enterprise SATA drives, and Gigabit Ethernet connection(s).

ExaGrid works seamlessly with all popular backup applications. With ExaGrid, backup jobs are sent directly from the backup application to ExaGrid for onsite disk-based backup. The existing backup application can create copies from the ExaGrid system directly to your existing tape library for offsite storage, or you can choose to deploy a second site ExaGrid system at an alternate location to reduce or replace off-site tape.

With ExaGrid, you can preserve your existing investment and keep your current backup application and processes. Using ExaGrid is as simple as pointing your existing backup jobs at a NAS share on the ExaGrid system. The system scales as required by adding ExaGrid servers, which virtualize into the GRID architecture automatically, adding capacity and processing power while acting and being managed as one system.

The ExaGrid Advantage

Highest Performance for Backup, Restore and Tape Copy

- Fastest backup performance using post-processing so nothing interferes with the data writing directly to disk, at the speed of disk.
- Fastest restore and tape copy performance with byte-level data deduplication which keeps the most recent backup in its whole form - no re-assembly from small blocks and large hash tables.

Scalable GRID Architecture

- ExaGrid provides plug and play growth in place – new systems virtualize together automatically – no splitting data or losing deduplication efficiency across separate systems.
- Performance scales with data growth because as storage capacity grows, corresponding processing and memory power scales in balance. As an example, our 100TB system has a backup throughput of up to 18TB per hour.
- Perfect for environments with up to 100 TBs of backup data.

Most Cost-Effective and Flexible Solution with No “Forklift” Upgrades

- No need to over-buy storage capacity up front – modular systems can be easily combined in a virtualized GRID to smoothly scale up for larger capacities as needed with no painful “forklift” upgrades.
- Multiple EX Series server configurations hold full backups of 1TB, 2TB, 3TB, 4TB, 5TB or 10TB plus retention. Any size server can be mixed and matched in multiple different configurations with up to ten servers combined in a single GRID.

Backup Aware Reporting

- Reports correlate backup jobs stored on the ExaGrid with the backup application providing great visibility into the status of the backup data.
- ExaGrid's disk-based backup is the only product that shows deduplication ratio by backup job, allowing organizations to optimize the result of byte-level data deduplication.
- ExaGrid's disk-based backup is the only product that shows replication status by backup job, ensuring that any remote site restores are done from complete backup jobs and that the most recent data possible is being used versus a guessing game during a critical recovery scenario.

Features

- Turnkey cost-effective disk-based backup solution with all hardware and software included.
- Unique data deduplication technology combined with last backup compression reduces the amount of disk space needed by as much as 50 to 1, resulting in a cost that is less than 30 percent of traditional SATA disk.
- InstantDR capability keeps the most recent full backup at a customer's disaster recovery site in a compressed but non-deduplicated form, ready for high-speed recovery. This provides for the fastest possible restore during a disaster recovery scenario. This unique capability is very different from competing solutions that have to reassemble the most recent backup from millions or billions of deduplicated chunks causing a much longer recovery time.
- Works with existing backup applications such as Backup Exec, NetBackup, ARCserve Backup, Simpana, Networker, vRanger Pro, VMware Backup, SQL Server Dump and others.
- Support for two-site or multi-site topologies to supplement or eliminate off-site tape with a live disk-based repository for long term off-site retention or disaster recovery.
- Management software notifies via SNMP or email that the repository is reaching capacity thresholds.
- RAID6 guards against up to two simultaneous disk failures.
- Scalable GRID computing architecture allows for growth and eliminates server obsolescence.
- Room for growth – by combining compression with byte-level data deduplication technology, an ExaGrid system can serve for years before capacity needs to be added. Using straight SATA drives, capacity needs to be constantly added.
- Single primary site system allows for existing offsite tape strategy.