

# ExaGrid Helps Backups Flow Smoothly at Rancho California Water District

CUSTOMER SUCCESS STORY



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**Dale Badore**  
Systems Administrator  
Rancho CA Water District

## Customer Overview

Rancho California Water District (RCWD) is a local, independent district that delivers high quality water, wastewater and reclamation services to more than 120,000 customers. RCWD serves the area known as Temecula/Rancho California, which includes the City of Temecula, portions of the City of Murrieta and unincorporated areas of southwest Riverside County. RCWD's current service area represents 100,000 acres, and the District has 940 miles of water mains, 36 storage reservoirs, one surface reservoir (Vail Lake), 47 groundwater wells, and 40,000 service connections. RCWD is located in Temecula, California.

## Rapid Data Growth Pushed the Limit of D2D2T Solution

RCWD had been performing daily incremental backups and weekly and monthly full backups via disk-to-disk-to-tape (D2D2T) to protect all of its data, including its Exchange and file server data, its databases and financial information such as check processing and payroll. But due to rapid data growth, its backups had become too large and the agency was close to running out of disk space.

## ExaGrid System Provides Cost Effective Relief

RCWD initially considered adding additional disk but then realized that a system that incorporated data de-duplication would be the best solution for its growing backup needs. The agency looked at disk-based backup solutions from Data Domain and ExaGrid, and chose a two-site ExaGrid system to provide both local backup and disaster recovery. RCWD installed its primary ExaGrid system in its main facility in Temecula, and plans to install a second-site system at its wastewater treatment facility two miles away.

“The cost of the two-site ExaGrid system was far less than the cost of adding a shelf and drives to our SAN,” said Dale Badore, systems administrator at RCWD. “We reclaimed the space on the SAN and got a better backup solution with disaster recovery capabilities for less money.”

## Data De-duplication, Scalability Important Factors

Data de-duplication and system scalability turned out to be the deciding factors in choosing the ExaGrid system over Data Domain.

“In doing the research, we felt that ExaGrid's post-process method for data de-duplication was more effective than Data Domain's in-line approach,” said Badore. “The ExaGrid approach doesn't take any process overhead on the backup server. Also, ExaGrid's data de-duplication technology makes it more efficient to transmit data between our two sites so there are no bottlenecks.”

ExaGrid combines last backup compression along with data de-duplication, which stores changes from backup to backup instead of storing full file copies. This unique approach reduces the disk space required by a range of 10:1 to 50:1 or more, delivering unparalleled cost savings and performance. ExaGrid delivers extremely fast backup performance because data is written directly to disk, and data de-duplication is performed post-process after the data is stored to reduce data. When used at a second site, the cost savings are even greater because ExaGrid's byte-level data de-duplication technology moves only changes, requiring minimal WAN bandwidth.

RCWD currently stores 60 copies of its daily, full and weekend backups on the ExaGrid

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system and has room for more. But looking ahead, system expandability will be important as RCWD's data grows.

"Scalability is an important issue for us, and the ExaGrid system was more expandable than the Data Domain system," said Badore. "With ExaGrid, if we need more space we can just add another unit, plug it in and point CommVault to the system. We couldn't ask for it to be any easier."

ExaGrid's GRID architecture provides easy scalability, so the system can grow as RCWD's backup requirements grow.

When plugged into a switch, additional ExaGrid systems virtualize into one another, appearing as a single system to the backup server, and load balancing of all data across servers is automatic.

The ExaGrid system works alongside RWDC's backup application, CommVault Galaxy™. "ExaGrid and CommVault work together nicely; as fast as CommVault can push the data out, the ExaGrid can pull it in. If we were writing to tape, everything would have to queue up and it would take forever," Badore said.

### Fast Restores, Expert Customer Support

Badore estimates that he needs to restore files two to three times per week, and using the ExaGrid system has saved him valuable time.

"We have an undelete function on our server, but it is limited by the size of the file and the age of the data. When we do need to restore data, it's either a larger file or one that is several days old," said Badore. "Prior to using the ExaGrid, we would have had to dig through tapes to find the correct one, load it in the library, and then check it in and pull the file off. The whole process took at least 30 minutes. With the ExaGrid, I simply point and click and the file is restored."

"We've experienced a high level of customer support with the ExaGrid team," said Badore. "They have a lot of knowledge in terms of their own product and of backup processes in general. They're dedicated and have spent a considerable amount of time to make sure that our installation is working correctly, and that's something we're always looking for in a technology partner."

### About ExaGrid Systems, Inc.

Customers worldwide depend on ExaGrid Systems to solve their backup problems—effectively and permanently. ExaGrid's disk-based, scale-out GRID architecture adjusts to increasing backup demands due to constantly growing data volumes. It is the only solution that combines compute with capacity as well as a unique landing zone to permanently shorten backup windows and eliminate expensive forklift upgrades. Learn more at [www.exagrid.com](http://www.exagrid.com).

### ExaGrid and CommVault Galaxy

CommVault Galaxy Backup and Recovery software contains extensive capabilities to simplify the management of backup media resources. Galaxy software writes backup data to a broad collection of storage devices, including disk as a media target.

This ability to write to magnetic disk as a functional equal of all other media types while exploiting the random access nature of the disk media sets Galaxy software apart.

Organizations using Galaxy can look to ExaGrid as an alternative to tape for nightly backups. ExaGrid sits behind existing backup applications, such as Galaxy, providing faster and more reliable backups and restores. In a network running Galaxy, using ExaGrid in place of a tape backup system is as easy as pointing existing backup jobs at a NAS share on the ExaGrid system. Backup jobs are sent directly from the backup application to the ExaGrid for onsite backup to disk.

### Intelligent Data Protection

ExaGrid's turnkey disk-based backup system combines high quality SATA drives with byte-level data de-duplication, delivering a disk-based solution that is more cost effective than standard SATA drives. ExaGrid's byte-level data de-duplication technology stores only the changes from backup to backup instead of storing full file copies, reducing the amount of disk space needed by a range of 10:1 to 50:1, or more, resulting in a solution that is 25 to 30% the cost of standard SATA drives.

ExaGrid is easy to install and use and works seamlessly with popular backup applications, so organizations can retain their investment in existing applications.

ExaGrid can be used at a primary site and at a second site to supplement or eliminate offsite tapes with a live data repository or for disaster recovery. When a second site is used, the cost savings are even greater because ExaGrid's byte-level data de-duplication technology moves only changes, requiring minimal WAN bandwidth.

**For more information about ExaGrid, please visit us at [www.exagrid.com](http://www.exagrid.com) or call us at 1-800-868-6985.**