Customer Overview

Morrow-Meadows Corporation (MMC) is a full service electrical contracting company providing solutions to clients in a wide range of industries along the West Coast, from large commercial and industrial projects to a Special Projects Division that also includes a service and maintenance group.

Streamlining Storage Process with ExaGrid System

Morrow-Meadows Corporation (MMC) has been using ExaGrid appliances for many years, but had not been leveraging the system to its fullest. Prior to switching all backups to ExaGrid, MMC had been using Norton software to back up to straight disk, copying the data to a tape drive. MMC eventually eliminated tape, and now the entire backup process occurs on the ExaGrid system. While upgrading its environment, MMC also replaced the Norton software with Unitrends, and has been pleased with the change.

Christian Rodriguez, backup manager at MMC, described a recent upgrade, “We've expanded the system with an EX13000E appliance, which allowed us to move the other two appliances to a remote location for disaster recovery. My ExaGrid customer support engineer helped me with the static IPs and setting everything up. He's helped me from the beginning. Working with ExaGrid has been a great experience.”

The ExaGrid system is easy to install and use and works seamlessly with all of the most frequently used backup applications, so an organization can seamlessly retain its investment in existing applications and processes. In addition, ExaGrid appliances can be used at primary and secondary sites to supplement or eliminate offsite tapes with live data repositories for disaster recovery. “There's simplicity with ExaGrid. I know it's there, it works, and I don't have to monitor it all the time,” said Rodriguez.

Measureable Results: Higher Dedupe Ratios and Shorter Backup Windows

MMC chose ExaGrid primarily for its deduplication capabilities. Rodriguez commented, “We used to dedupe our data on our NAS servers, but we needed a better deduplication process. We looked into ExaGrid and were impressed by the landing zone and the deduplication ratios it achieves.” Rodriguez has seen some great results with deduplication ratios increasing as high as 8.84:1.

MMC used to perform weekly fulls that took too long to complete. “Speed was an issue. With Norton, a 7TB backup would take about 52 hours, and by the time I finished one backup, if it didn't fail or cancel, then every Friday I would have to start all over again. Now it's down to 28 hours because the ExaGrid system is already catching everything and deduping it. It's a lot faster now,” Rodriguez noted.

Using the combination of ExaGrid and Unitrends, MMC only needs to do a full backup once every three weeks, and it takes half the time that it did with Norton. “We used to do a full backup every Friday with incrementals during the week, so our ExaGrid system was busy deduping all the time. Once we switched to Unitrends, we started backing up every three weeks using what they call synthetic masters. It's a lot faster now - only 28 hours - and that's with a lot of data to back up. I am very happy with the shorter 28-hour backup window compared to the 52-hour window it took with Norton.”

Key Benefits:

- Backup windows are 50% shorter after switching to ExaGrid
- ExaGrid support goes ‘above and beyond’ to optimize system
- Backups are simple and reliable, requiring less time to manage

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Christian Rodriguez
Backup Manager
ExaGrid writes backups directly to a disk landing zone, avoiding inline processing and ensuring the highest possible backup performance, which results 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.

Customer Support That Goes ‘Above and Beyond’

Rodriguez appreciates that ExaGrid customer support is always helpful in resolving issues and offers useful recommendations to optimize the system. “My customer support engineer goes above and beyond. He’s helped me out when my backups were taking too long, when data wasn’t deduping correctly, and when I was running out of landing space. At one point, he logged in and purged data when I had an issue with purging old dates and three months of data was stored that shouldn’t have been. He knows tips and tricks, and he makes the system effortless, working with me remotely on things like how to rename, change passwords and IP addresses, etc. He’s also showed me how to upgrade some of the optical inputs on the ExaGrid so that it runs much faster.”

The ExaGrid system was designed to be easy to set up and maintain, and ExaGrid’s industry-leading customer support team is staffed by trained, in-house engineers who are assigned to individual accounts. The system is fully supported, and was designed and manufactured for maximum uptime with redundant, hot-swappable components.

Unique Architecture

ExaGrid’s award-winning scale-out architecture provides customers with a consistent backup window regardless of data growth. Its unique zone-level approach to data deduplication retains the most recent backup in its full undeduplicated form, enabling the fastest restores, offsite tape copies, and instant recoveries.

ExaGrid’s multiple appliance models can be combined into a “GRID” configuration of up to 2.4PB raw capacity, allowing full backups of up to 1PB with a combined ingest rate of 200TB/hr. The appliances virtualize into one another when plugged into a switch so that multiple appliance models can be mixed and matched into a single configuration. Each appliance includes the appropriate amount of processor, memory, disk, and bandwidth for the data size, so as each appliance is virtualized into the GRID, performance is maintained and backup times do not increase as data is added. 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.

This combination of capabilities in a turnkey appliance makes the ExaGrid system easy to install, manage, and scale. ExaGrid’s architecture provides lifetime value and investment protection that no other architecture can match.

ExaGrid and Unitrends Virtual Backup

The partnership between ExaGrid and Unitrends Virtual Backup (UVB) provides a cost-effective disk-based backup solution that maximizes data reduction and scales to meet the needs of demanding enterprise environments.

The combination of ExaGrid’s and UVB’s virtual server data protection solutions allows customers to utilize UVB in VMware vSphere, Microsoft Hyper-V, and Citrix XenServer virtual environments on ExaGrid’s disk-based backup system. This combination provides fast backups and efficient data storage as well as replication to an offsite location for disaster recovery. The ExaGrid system leverages UVB’s built-in backup-to-disk capabilities and ExaGrid’s zone-level data deduplication for additional data (and cost) reduction over standard disk solutions. Customers can use UVB’s built-in source-side deduplication in concert with ExaGrid’s disk-based backup system with zone-level deduplication to further shrink backups.

In addition, customers can perform replication of backups to offsite storage for disaster recovery purposes without sacrificing performance of critical backup and recovery features. Using UVB’s Instant VM Recovery, ExaGrid and UVB customers can run the virtual machine directly from the backup on the ExaGrid appliance. Once the primary storage environment has been brought back to a working state, the VM running on the ExaGrid appliance can then be moved to primary storage for continued operation with zero downtime.

About ExaGrid

ExaGrid provides hyper-converged secondary storage (HCSS) for backup with a unique landing zone and scale-out architecture. The landing zone enables the fastest backups, restores, and instant VM recoveries. The scale-out architecture includes full appliances in a scalable system and ensures a fixed-length backup window as data grows, eliminating expensive and disruptive forklift upgrades. Learn more at www.exagrid.com.