Customer Overview
Since 1905, G&W Electric has helped power the world with innovative power systems solutions and products. With the introduction of the first disconnectable cable terminating device in the early 1900s, Illinois-based G&W began to build a reputation for innovative engineered solutions to meet the needs of systems designers. With an ever-present commitment to customer satisfaction, G&W enjoys a worldwide reputation for quality products and superior service.

Limited Retention with SAN and Tape
G&W Electric had been backing up data from its VMs to a SAN using Quest vRanger and Veritas Backup Exec to copy the backups to tape. Angelo Iannicciari, G&W's IT systems engineer, found that this method severely limited the amount of retention that could be kept. "We were constantly running out of space because our only repository was an old SAN, which could only store about two weeks’ worth of data. We’d copy backups to tape, and then manually delete data off of the SAN. Copying data from the SAN to tape usually took four days, because in addition to the slow nature of tape backups, the tape still used a 4Gbit fibre channel, but our infrastructure had changed to a 10Gbit SCSI."

G&W’s contract with Quest was up for renewal, so Iannicciari looked into other backup applications and hardware, and was very interested in Veeam. Because Iannicciari also wanted to establish a DR site, the new solution needed to be able to replicate data offsite.

ExaGrid Outshines Competitors During Search for New Solution
Iannicciari knew he wanted to use Veeam, which ruled out the Quest DR appliance. He looked into Dell EMC Data Domain, but it was too expensive, and it required forklift upgrades every few years. He also researched HPE StoreOnce and had a hard time finding any information on user experience.

Finally, he researched ExaGrid, and after reading a few of the hundreds of customer stories on the website, he called the sales number listed. "The sales team got back to me quickly and put me in touch with a sales engineer, who took the time to understand what we were looking to do. The sales account manager talked me through ExaGrid’s unique features, like the landing zone and adaptive deduplication, which none of the other products had. What really cinched the deal for me were the customer testimonials, both from the stories I found on the ExaGrid website and from a current ExaGrid customer I was able to speak to. I had trouble finding more than one testimonial on Dell EMC’s website, and it took a few days for their sales team to find one for me."

“...and the price quote for two ExaGrid systems came in $40,000 less than Dell EMC Data Domain’s quote for one device! Between the customer testimonials, the great pricing, and the five-year support contract—which is absolutely amazing—I knew I wanted to go with ExaGrid.”

Angelo Iannicciari
IT Systems Engineer

Key Benefits:
- G&W’s backup windows now significantly shorter using ExaGrid and Veeam
- Scalable architecture fits nicely into the company’s future IT infrastructure planning
- ExaGrid selected over competitive vendors for best support, architecture, and features as well as competitive pricing — and extensive customer testimonials
- G&W doesn’t need to manually delete data anymore to create storage; in fact, retention has doubled from two weeks to four
- ExaGrid support is ‘second to none’
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**ExaGrid Fits into Future Planning**

G&W purchased two ExaGrid systems and installed one at its primary site that is replicating critical data to the system that will eventually be placed at its DR site. “My ExaGrid support engineer helped me get the appliances configured to the network. We were able to also install the DR appliance, and we’ve started replicating data to it. We don’t have a permanent home for it yet, but it will be all set to run at a DR facility once we’re ready,” said Ianniccari.

Ianniccari finds working with his ExaGrid support engineer to be very helpful, and he appreciates the learning opportunities due to ExaGrid support taking the time to work through projects with him. “I believe that my support engineer, or anyone on the support team, could hold anybody’s hand and walk them through an install or any situation. You don’t even have to know anything about backups. The support is second to none! I was new to using Veeam, and my ExaGrid support engineer helped me set it up and made sure everything was working well. She is a rock star! She always responds quickly to any questions I have and takes the time to guide me through projects. She recently showed me how to set up an NFS share so that in the future, I can do it myself.”

G&W replaced its aging SAN with ExaGrid, eliminating the need to manually delete data every two weeks. Retention has doubled and backups no longer need to be copied to tape; however, Ianniccari is looking into archiving to cloud storage such as AWS, which ExaGrid supports. “I’m able to keep a month’s worth of data on the ExaGrid system, and I still have plenty of room.”

Because Ianniccari expects future data growth, he values ExaGrid’s scalable architecture. “Not only has ExaGrid met our current needs because the sales team sized our environment correctly, but if we ever do outgrow our current system, we can revisit it and won’t need to forklift everything out. We can build upon and expand our existing system or arrange for a buyback toward a larger appliance.”

**‘Unbelievable’ Data Deduplication**

Ianniccari has been impressed with the range of deduplication ratios that ExaGrid has been able to achieve. “The deduplication ratios are unbelievable! We’re getting an average of 6:1 across all of the backups, although I have seen that average number get up to 8:1, and it’s over 9.5:1 for our Oracle backups, in particular,” said Ianniccari. Veeam has a “dedupe friendly” compression setting which further reduces the size of the Veeam backups in a way that allows the ExaGrid system to achieve further deduplication. The net result is a combined Veeam-ExaGrid deduplication ratio of 6:1 to 10:1, which greatly reduces the amount of disk storage required.

**Quick Backups and Restores**

Now that ExaGrid and Veeam have been implemented, Ianniccari backs up data in daily incrementals with a weekly synthetic full, and keeps 14-day retention save points on Veeam. “The daily incrementals take just ten minutes to back up now. It used to take up to two hours for an incremental to back up to the SAN using vRanger,” said Ianniccari.

Backing up the Exchange servers used to take ten-and-a-half hours to complete on the SAN but now take just two-and-a-half hours using ExaGrid and Veeam. Once a week, Ianniccari backs up Oracle data, and those backups are just as impressive. “When I backed up Oracle data using vRanger to the SAN, I was looking at up to nine hours for a full backup. Now, that backup takes four hours or less—it’s pretty amazing!”

In addition to a less complicated and quicker backup process, Ianniccari has found that restoring data is also faster and can be done with a more targeted approach. “When I used Backup Exec to restore a mailbox from our Exchange server, I would have to play back the whole server database from the tape copy, and it would take up to two hours to get the mailbox restored. I recently had to restore ten mailboxes after some database corruption, and I was able to drill down to the individual mailboxes in Veeam and restore them. Restoring an entire mailbox took just ten minutes, from start to finish. As far as file restores, it had taken about five minutes to restore an individual file on vRanger, which isn’t bad, but it’s down to 30 seconds for Veeam to restore a file from ExaGrid’s amazing landing zone.”

**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](http://www.exagrid.com).