



Unistress Relies on ExaGrid's Deduplication with Veeam for Maximized Data Storage

unistress



USA

Key Benefits:

- ExaGrid consistently 'came out on top' when measured against other products
- Unique hourly backup process stays on schedule
- IT manager 'blown away' by deduplication ratios
- Proactive ExaGrid support monitors health of system, takes quick action should issues arise

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David Serafini
IT Manager

Customer Overview

Unistress Corporation, a subsidiary of Petricca Industries, specializes in the design, production, and construction of large-scale precast/prestressed concrete structures. Its manufacturing plant is located in Pittsfield, Massachusetts, and serves New England and the tristate New York metro areas. Unistress products are found in a wide variety of structures such as bridges, power plant cooling towers, railway stations, micro-chip manufacturing plants, stadiums, retail and industrial buildings, casinos, and multi-level parking facilities.

'No Comparison' with Other Backup Products

Unistress had been using NAS and the HPE MSA 2000 series as a NAS box to store its backups, with Veeam as its backup application. When IT manager David Serafini started at Unistress, he began a long-term project to convert all physical servers to VMs and completely virtualize Unistress' environment, so he decided to look into other backup storage solutions.

"During our search we came across ExaGrid, which came out on top throughout our investigation when measured against other products. There was no comparison when we saw how much dedupe we could get with ExaGrid. Now that we have switched to ExaGrid, we are seeing deduplication ratios between 8:1 and 9:1. I've never seen ratios that high before in all my years working in IT – that's incredible," said Serafini.

Easy Installation at Primary Site and DR Site

Serafini is impressed at how easy it was to install ExaGrid appliances. "We purchased an EX32000E model at first for our primary site and then an EX40000E model the next year, sending the EX32000E model to an offsite location for disaster recovery. Our ExaGrid support engineer assisted with both installations. We simply plugged in each appliance, ran our fiber cables to them, and our support engineer helped with some slight networking configurations, and the system took off. It was perfect."

The ExaGrid system is easy to install and use and works seamlessly with the industry's leading backup applications so that an organization can retain its investment in its existing backup applications and processes.

In addition, ExaGrid appliances can replicate to a second ExaGrid appliance at a second site or to the public cloud for DR (disaster recovery).



Deduplication Vital to Unique Backup Process

Unistress stores a large quantity of data, made up of large file types such as AutoCAD files. Many people within the company store versions of similar files for projects that they are working on in several drives. According to Serafini, "We have a lot of data here. We're making bridges, so we have to be safe. There's a lot of email, sending out designs and blueprints for checks and revisions multiple times. So the wires are hot here; we have a great amount of data going back and forth. I'm blown away by how much deduplication we are getting with the ExaGrid system. We are actively storing 166TB in a space of 21TB. It's crazy that that even works. If hadn't seen it in the reports, I wouldn't believe it. It's just ridiculous; that's 8:1!"

"Most blueprints that are drawn up are AutoCAD files and Revit files by Autodesk, so they are huge files. Even a PDF can be 30-100MB. We have thousands of files and drawings. We save everything, and we save it in three spots: in SharePoint and on two local drives. People also often save another copy on a personal drive. We probably do have a fair amount of duplicated data, but I'd rather have more data – disk drives are cheap. It's easier to delete a file than it is to create it, so I'd rather just save it."

To accommodate the large quantity of data stored, Serafini backs up Unistress data in a rather unique way, using reverse incrementals taken every hour as well as a nightly snapshot that is saved for six months. The high deduplication ratios achieved with the ExaGrid system allow Serafini to maintain this hourly process. Serafini explained, "We snap our servers every hour and we save those for two weeks. We also snap our servers once a night and we save those snaps for six months. We're getting incredible deduplication out of the ExaGrid system; it handles our hourly backup jobs perfectly and only takes 20-30 minutes to back up the whole server."

"Backups and restores are a balancing act, so I do what's called a reverse incremental. I'm banking that I don't have to do many restores, so I'm taking the upfront quickness that the reverse incremental provides with the understanding that when I do have to restore, it will take longer to restore by the nature of how I have to put everything together before it can restore. With that said, it's still fast, so the restore may take three minutes instead of one, or fifteen minutes instead of twelve. However long it takes, it's still relatively fast."



Proactive Support Ensures System Runs Smoothly

Serafini is pleased that ExaGrid's proactive customer support helps to keep the system running smoothly. "A great thing about working with ExaGrid is its customer support. Our assigned support engineer monitors our system and lets us know in real time if there is something in the error log. One time we had lost a hard drive, and I noticed it but I was out of the office. When I returned the next day, my colleague let me know that a hard drive was sitting on my desk. Our engineer had seen that a hard drive failed and sent me out a new one. I popped it in, and we were good to go."

Using ExaGrid's GUI, Serafini can easily monitor the activity and health of the system. "The ease of management is one of the best aspects of using ExaGrid. The reporting on it is awesome, too. This is a great system. I like looking at a single pane of glass to see both of the ExaGrid appliances, the one here and the one at our DR site. I can imagine that if someone managed IT for a huge organization with offices all over the world and a large network of appliances, that it would be great to look on one page to monitor all the backup devices, and see the graphs and run reports, and check on what is deduping or what is in progress," said Serafini.

The ExaGrid system was designed to be easy to set up and operate. ExaGrid's industry-leading level 2 senior support engineers are assigned to individual customers, ensuring they always work with the same engineer. Customers never have to repeat themselves to various support staff, and issues get resolved quickly.

ExaGrid and Veeam

Veeam's backup solutions and ExaGrid's Tiered Backup Storage combine for the industry's fastest backups, fastest restores, a scale-out storage system as data grows, and a strong ransomware recovery story – all at the lowest cost.

ExaGrid-Veeam Combined Dedupe

Veeam uses changed block tracking to perform a level of data deduplication. ExaGrid allows Veeam deduplication and Veeam dedupe-friendly compression to stay on. ExaGrid will increase Veeam's deduplication by a factor of about 7:1 to a total combined deduplication ratio of 14:1, reducing the storage required and saving on storage costs up front and over time.

About ExaGrid

ExaGrid provides Tiered Backup Storage with a unique disk-cache Landing Zone that enables fastest backups and restores, a Repository Tier that offers the lowest cost for long-term retention and enables ransomware recovery, and scale-out architecture which includes full appliances with up to 2.7PB full backup in a single system.

Learn more at www.exagrid.com.