Community College Gets Instant VM Recoveries with Veeam and ExaGrid

Customer Overview
Catawba Valley Community College (CVCC) is a public community college located in Hickory, North Carolina. The college, established in 1958, is part of the North Carolina Community College System. The college is governed by a Board of Trustees of almost 48 men and women representing a broad spectrum of leadership from various constituency groups within the college community.

Data Loss Drives New Backup Infrastructure
The IT department at Catawba Valley Community College decided to look for a new backup solution for its virtual environment after suffering a major data loss.

“Our backup strategy for our virtual environment was spotty at best. We had a two-node VMware solution hosted on hardware that was becoming increasingly unstable. Eventually, it got to the point where the hardware was unrecoverable and so was the data. We lost a lot of data and had to rebuild pretty quickly,” said Paul Watkins, IT manager at Catawba Valley Community College. “That data loss was the catalyst for us to take our backups more seriously, and we immediately began looking for a new solution.”

ExaGrid and Veeam Deliver Strong Data Deduplication, Fast Recoveries
Watkins said that the first step in the process was to evaluate and select a best-of-breed backup solution designed for virtual environments, and after doing some research, the CVCC IT team decided on Veeam Backup & Recovery. The team then chose ExaGrid as its backup target after a strong recommendation by Veeam.

“We liked the tight integration between ExaGrid and Veeam,” said Watkins. “Also, we looked carefully at how the two products work together to deliver high rates of deduplication and the speed and ease of recoveries.”

Data sent through Veeam to the ExaGrid system is first deduplicated by Veeam and then is deduplicated again by the ExaGrid system.

ExaGrid combines standard compression along with zone-level data deduplication, which stores changes from backup to backup instead of storing full file copies. ExaGrid delivers extremely fast backup performance because data is written directly to disk, and data deduplication is performed post process after the data is stored to reduce data. When a second site is used, the cost savings are even greater because ExaGrid’s zone-level data deduplication technology moves only the changes from backup to backup, requiring minimal WAN bandwidth.

Watkins said CVCC has also been impressed with how fast VMs can be recovered by using the two products together.

With ExaGrid and Veeam, the college has the ability to run a VM directly from the ExaGrid in the event of a primary storage outage or other issue that causes the primary storage to become unavailable. Data is backed up to ExaGrid’s landing zone, a high-speed cache that retains the most recent backups in complete form. Then using Veeam’s Instant VM Recovery, a VM can be run 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 system can be restored to primary storage for continued operation.

“Because of our experience losing data, we were particularly interested in fast VM recoveries, and ExaGrid and Veeam deliver exactly that. We are very pleased with the performance of our new solution.”

Key Benefits:
- Integration between Veeam and ExaGrid provides fast VM recovery
- When primary storage is unavailable, a VM can be run from ExaGrid’s landing zone
- Veeam and ExaGrid customer support teams are well versed in each other’s products
- Backups are ‘extremely fast’
- CVCC now has DR protection it can count on
recoveries. Instant VM Recovery enables us to recover from a disaster significantly faster than with other solutions because we can restore entire VMs from the landing zone with ‘point and click’ access,” said Watkins. “And because the ExaGrid backs up the data to a landing zone, our backup times are extremely fast. We can back up our Hyper-V cluster in less than six hours.”

Helpful, Knowledgeable Support Helps Keep Solution Running Trouble-free

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.

Watkins said he’s found the support engineer who is assigned to CVCC’s account to be proactive and knowledgeable.

“Our support engineer has been extremely helpful. In fact, she recently contacted us to update the system and then performed the upgrade remotely. That level of support is uncommon these days,” he said. “Our ExaGrid support engineer and the engineer on the Veeam side are both experienced with each other’s products, which really reduces the finger-pointing and makes things more efficient.”

Easy Scalability with GRID Architecture

Currently, CVCC only backs up its virtual infrastructure to the ExaGrid system, but Watkins said that the college is considering moving its physical server backups to the ExaGrid system in the future.

“One of the nice things about the ExaGrid is that we can take advantage of its GRID architecture to easily expand the system to handle more data or more servers in the future,” he said. “We’re considering replacing tape in the future if our budget allows.”

ExaGrid uses a GRID-based configuration, so when the system needs to expand, additional appliance nodes are attached to the GRID, bringing with them not only additional disk but also processing power, memory, and bandwidth. This type of configuration allows the system to maintain all the aspects of performance as the amount of data grows. In addition, as new ExaGrid appliance nodes are added to the GRID, the ExaGrid automatically load balances available capacity, maintaining a virtual pool of storage that is shared across the GRID.

“The combination of ExaGrid and Veeam is powerful. We’re now more confident in our ability to properly back up our data, and if disaster strikes, we know we can quickly and easily restore individual files or entire VMs,” said Watkins.

ExaGrid and Veeam

The combination of ExaGrid’s and Veeam’s industry-leading virtual server data protection solutions allows customers to utilize Veeam Backup & Replication in VMware, vSphere, and Microsoft Hyper-V 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 fully leverages Veeam Backup & Replication’s built-in backup to disk capabilities and ExaGrid’s zone-level data deduplication for additional data reduction (and cost reduction) over standard disk solutions. Customers can use Veeam Backup & Replication’s built-in source-side deduplication in concert with ExaGrid’s disk-based backup system with zone-level deduplication to further shrink backups.

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.