Customer Overview
The Northwest Catholic District School Board has six Catholic elementary schools and two K-8 school boards. The Board covers a vast geography, serving the communities of Sioux Lookout, Dryden, Atikokan, Fort Frances to Rainy River, and First Nations within the jurisdiction of the Board in Northwestern Ontario.

A Series of Unfortunate Events
Northwest Catholic District School Board (NCDSB) had been running Veritas Backup Exec to tape for a number of years and aside from the typical cumbersome nature of tape, it was a workable solution – until the school board virtualized.

To back up its new virtualized environment, the school board purchased a new backup storage solution. With a server in Dryden backing up data from the northern locations and a server in Fort Frances backing up data from the southern locations, NCDSB was able to cross-replicate at night for off site disaster recovery protection.

“It worked very well,” said Colin Drombolis, manager of information systems at NCDSB. “The seeding, the mirroring, all worked awesome – until last December when we lost one of our servers.”

During the rebuild, Drombolis was asked by the vendor to plug in two USB drives to download the seeds and bring them to Fort Frances manually because it was too much data to send over the wire. However, when he plugged in the USBs, instead of mounting the USB drives, they mounted the SAN and started copying the files over.

“When they got to my SAN, they stomped on my VMware File System which started killing all my VMs. They were all wiped out, and we had to do a restore. Some of the restores worked, and some didn’t. But, of course, the one that didn’t work was probably the most important one, our financial HRIS.

“Luckily, two days prior, I had noticed that our backup server was failing and I did a Windows file copy of all of our data onto my workstation – and that’s how we restored our data. But we were still down for a week. Fortunately, we had just finished payroll. The failure happened on a Thursday night, and payroll’s done on Wednesdays. Honestly, it couldn’t have happened at a better time; it was the day before Christmas vacation.

“I was working like crazy over the holiday, sleeping maybe four hours a night for three days until we got things back up and running, but it took at least a week to get everything fixed. It was horrible,” said Drombolis.

Veeam and ExaGrid Take Backup Window from 1.5 Hours to 7 Minutes
After a catastrophic (and sleepless) Christmas, Drombolis immediately started looking at new backup solutions. He tested Veeam as well as a few others, and Veeam stood out.

“It was simple and the price was right, so that’s what we went with. We didn’t have budget for a disk-based backup solution at that time, so we bought a cheap NAS device, and we were using that until this budget year.”
Veeam suggested that if Drombolis wanted data deduplication to check into ExaGrid, and he made the purchase. According to Drombolis, it was very simple to set up, the GUI is easy to use, and the reporting is very helpful.

“The ExaGrid system generates a daily report on how dedupe is doing, how much space was used in the last day, how much space is left, etc. I look at it every day, and it gives me a good picture of where I stand,” he said.

According to Drombolis, Veeam and ExaGrid make an amazing team. “It used to take an hour and a half for an incremental to complete, and now it’s done in under seven minutes.”

Scalability, Replication, and Deduplication Key Factors

Central to Drombolis’ decision to purchase ExaGrid was the ability to start with just a single ExaGrid appliance and subsequently build on it.

“I don’t have to buy everything at once, and I know down the line I won’t have to throw the appliance away and buy another one because it’s not big enough. The scalability was very important, and so were replication and deduplication (it’s doing a very good job at that). Early on, I didn’t see much in the way of dedupe, but as time goes on, that’s when you see the dedupe kicking in. I’m very happy with it.”

ExaGrid Customer Support Goes ‘Above and Beyond’

Customer support that would be considered ‘above and beyond’ at most other companies is what’s standard at ExaGrid.

“Typically, when I have problems involving more than one vendor, I’ll call customer support for the hardware, and they’ll tell me it’s a problem with the software; then I’ll call support for the software and they’ll say it’s the hardware – it’s pretty frustrating! One time, I ended up going online and just fixing it myself.

“But when I was having issues with ExaGrid and Veeam at one point, I talked to our customer support rep, and she worked with me to figure it out – she went above and beyond. I knew then that ExaGrid’s support was going to work for us.”

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.

ExaGrid-Veeam Combined Dedupe

Veeam uses the information from VMware and Hyper-V and provides deduplication on a “per-job” basis, finding the matching areas of all the virtual disks within a backup job and using metadata to reduce the overall footprint of the backup data. Veeam also 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. This approach typically achieves a 2:1 deduplication ratio.

ExaGrid is architected from the ground up to protect virtualized environments and provide deduplication as backups are taken. ExaGrid will achieve a 3:1 up to 5:1 additional deduplication rate. The net result is a combined Veeam and ExaGrid deduplication rate of 6:1 upwards to 10:1, which greatly reduces the amount of disk storage required.

About ExaGrid

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