



# NADB Overcomes Backup Challenges with ExaGrid-Veeam Solution, Tightens DR Strategy with Automated Replication



USA

## Key Benefits:

- Second site enabled tighter approach to disaster recovery
- ExaGrid-Veeam integrated solution provides fast restores and recoveries – speed is ‘just amazing’
- ExaGrid maximizes bandwidth efficiency, important in light of NADB’s low-bandwidth site-to-site VPN
- Ease of expansion important in light of numerous future unknowns

**“When we select a new technology solution to implement, it’s absolutely critical that the new solution not bring with it an overhead increase. We need to be able to implement exactly like we have with ExaGrid and Veeam; they work together very well. I was able to implement it easily, and I don’t have to watch over it.”**

**Eduardo Macias**

Deputy Director of Administration

## Customer Overview

*The North American Development Bank (NADB) and its sister institution, the Border Environment Cooperation Commission (BECC), were created by the governments of the United States and Mexico in a joint effort to preserve and enhance environmental conditions and the quality of life of people living along the U.S.-Mexico border. NADB and BECC work with communities and project sponsors to develop, finance, and build affordable and self-sustaining projects with broad community support. Within this project development model, each institution is charged with specific responsibilities, with BECC focusing on the technical aspects of project development, while NADB concentrates on project financing and oversight for project implementation. NADB is authorized to serve communities in the U.S.-Mexico border region, which extends approximately 2,100 miles from the Gulf of Mexico to the Pacific Ocean.*

## Challenges Constrain Backup Alternatives

Before NADB implemented ExaGrid, they had two challenges: they had only one site located in San Antonio, Texas, and – like many organizations – were limited in terms of budget. Due to the single site and budget constraints, NADB continued to back up to tape so that they could take backups offsite for safekeeping. “We considered a cloud service where we could back up to a local appliance and then upload to the cloud, but not only was it cost prohibitive, we’d also have the problem of it taking too long to recover from a major disaster – the recovery time objective,” said Eduardo Macias, Deputy Director of Administration at NADB.

Then, two years ago, it was announced that NADB was going to be merged with the BECC, located in Ciudad Juarez, Chihuahua, Mexico, just across the border from El Paso, and that opened up the possibility of backing up to an appliance and replicating to the second site.

“We talked to the BECC and even though we weren’t yet legally merged, they agreed to let us use their data center to house our disaster recovery equipment,” said Macias. “That enabled us to completely change our DR approach. Now that we have a second site, we can back up to the primary ExaGrid system and then replicate to the offsite ExaGrid that we have in Ciudad Juarez.”

## Desire to Virtualize with a Streamlined Backup Solution Leads to Veeam and ExaGrid

At the time that Macias was considering virtualizing with Hyper-V, he looked at a number of different backup solutions. “When we evaluated Veeam and ExaGrid, it was important to us that it was an integrated solution. One thing I really liked was the way that Veeam and ExaGrid handle



restores and recoveries because speed is very important. ExaGrid has the landing zone to store recent backups as well as the repository for longer-term deduplicated data, and being able to restore data or run a VM from the ExaGrid unit was a key issue. It’s common for people here to mess up files and request that they be restored. Every once in a while, I’ve had to restore a complete VM, and the speed is great – it’s just amazing!

“Bandwidth efficiency was another key issue for me. Our connection to the site that we use for replication is a site-to-site VPN and it is low bandwidth, so it was very important to have a solution that would be very effective and efficient. Now it’s a bit bigger because we use it for other things, but this is still a key point,” said Macias.

## Backups ‘Extremely Fast’

“My backups used to take all night – all night! Now, we do daily incrementals and a weekly synthetic full over the weekend. The incremental starts at 7:00 pm and is done 30 minutes later, and the synthetic full takes about four hours. Once a month, I do an active full, and that typically takes about eight hours. It’s extremely fast and I’m very impressed! I stopped paying attention to whether

backup works or not because I know it actually does! I know my backup starts at 7:00 pm and before 7:30 pm, I've received the e-mails that the backups were successful," he said.

## Installation That Couldn't Be Easier

ExaGrid appliances can be used at primary and secondary sites to supplement or eliminate offsite tapes with live data repositories for disaster recovery. NADB bought its first ExaGrid appliance for its San Antonio site, and a few months later, bought a second one for Ciudad Juarez. According to Macias, "We did the installation with a technician from our reseller who unpacked the appliance, put it in the rack, turned it on, and got in touch with Diane D., our ExaGrid customer support engineer. At that point, Diane took over. She configured and tested the device, and let us know when it was ready.

"When we did the installation for the Ciudad Juarez site, that was easy, too. We had that system shipped to San Antonio. Once it was unpacked and racked, Diane connected to it, configured everything and Pre-Seeded it with an initial replication. When she was finished, we turned the appliance off, repacked it, and shipped it to Ciudad Juarez. When they received it, all they had to do was unpack and rack it, and turn it on. The system was preconfigured – with data and everything – and ready to go. It was beautiful! It's a really good approach to do it that way, and Diane did an awesome job."

Macias reports that he recently noticed that replication had stopped. "Our internal connection in Ciudad Juarez dropped over the weekend and was disconnected for about 24 hours. During that time, a full backup had been done at our primary site in San Antonio before the connection had been restored. I called Diane and asked her to double check that it was replicating. She logged in and confirmed that the system was replicating. She kept an eye on it and emailed me to let me know when it had finished."

## Ease of Scalability Important in Light of Future Unknowns

The ExaGrid system can easily scale to accommodate data growth, and this was especially important to Macias when he purchased the ExaGrid system. "We had no idea how much storage we were going to need, especially in light of the merger that we had on the horizon, which still isn't completely final. When it is, we plan to use the ExaGrid system to back up all of that data also and will probably need to double our capacity, so the ease of expanding the system was a big issue for us."

ExaGrid's appliance models can be mixed and matched into a single scale-out system allowing a full backup of up to 2.7PB with a combined ingest rate of 488TB/hr, in a single system. The appliances automatically join the scale-out system. Each appliance includes the appropriate amount of processor, memory, disk, and bandwidth for the data size. By adding compute with capacity, the backup window remains fixed in length as the data grows. Automatic load balancing across all repositories allows for full utilization of all appliances. Data is deduplicated into an offline repository, and additionally, data is globally deduplicated across all repositories.

## 'Awesome' Customer Support

ExaGrid's industry-leading customer support team is staffed by trained, in-house level 2 support engineers who are assigned to individual accounts. "We're a small organization with very limited resources – we don't have an expert on backup, and we don't have an expert on storage – so when we select a new technology solution to implement, it's absolutely critical that the new solution not bring with it an overhead increase. We need to be able to implement exactly like we have with ExaGrid and Veeam; they work together very well. I was able to implement it easily, and I don't have to watch over it," said Macias.

"I keep an eye on things, but it's not a situation where I need to do this or maintain that. That's overhead to me, and because I don't have a person dedicated to backup, it's very important to me that I can rely on ExaGrid customer support to handle things for me. I don't have the expertise to do it, and I don't want to have the expertise to do it. I want to be able to rely on someone that actually has that expertise – someone I know and trust that will make it work – and that's the relationship that we have now with ExaGrid customer support."

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

