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 offsite 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.

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
Backups ‘Extremely Fast’

“[Javier Macias] recently noticed that replication had stopped. “Our 200TB backup... “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 GRID computing software makes the system highly scalable, and when plugged into a switch, appliances of any size or age can be mixed and matched in a single GRID system with capacities of up to a 1PB full backup plus retention and an ingest rate of up to 200TB per hour.

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.

“We 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, re-packed 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.”

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‘Awesome’ Customer Support

ExaGrid’s industry-leading customer support team is staffed by trained, in-house level 2 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’s Joint Solution

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

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.