



Veeam and ExaGrid Cut Backup Time in Half for Trustpower



NEW ZEALAND

Key Benefits:

- 50% reduction of backup window
- Maximum data protection with replication to multiple sites
- Powerful integration between Veeam and its primary storage (HPE Nimble and Pure Storage) and ExaGrid

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Gavin Sanders

ISP Systems Engineer

Customer Overview

Trustpower Limited is a New Zealand-based company offering Electricity, Internet, Phone and Gas services and is listed on the New Zealand stock exchange. Trustpower's history dates back to Tauranga's first power station in 1915. As a leading electricity generator and retailer in the country, Trustpower supplies electricity to more than 230,000 customers nationwide and 100,000 telecommunications customer connections, powering numerous homes and businesses nationwide. Trustpower's electricity generation has a strong focus on sustainability, with 38 hydro power stations across 19 hydroelectric power schemes.

IT Staff Addresses Challenges in Backup Environment

In a remote island nation like New Zealand, ensuring constant network connectivity is notoriously challenging. As a leading power company and Internet service provider (ISP), Trustpower relies on uninterrupted network availability to provide its customers with an optimal Internet experience.

When ISP Systems Engineer, Gavin Sanders, joined Trustpower five years ago, they had no solid backup strategy in place. Data restores were not being regularly tested, making the business vulnerable to potential data loss. The company was “primarily using HP equipment back then,” he shared, backing up data using HP backup software to HP tape libraries, and spinning disk NAS units. The software and physical storage solution was cumbersome, expensive, and did not dedupe or compress backups effectively.

This was problematic from a business standpoint, as any downtime in the network and servers could impact Trustpower's service delivery – from customer service, email communications, and ability to retrieve customer data, to the worst-case scenario of customers not receiving any network service at all.

The incumbent backup solution was not satisfactory as it could not ensure recovery of the production environment in the event of downtime, which could limit their ability to provide customers with reliable Internet service. Furthermore, a physical storage and backup system was not very suitable for a virtual environment.

Sanders explained, “We really needed a reliable solution that was very well-integrated and designed to work with VMware.”

In addition to a powerful backup solution that could keep their networks and servers running 24/7, Trustpower also needed a dedicated backup target system that was cost-effective, self-sufficient and offered strong deduplication. With newly opened data centres in New Zealand and Australia to increase proximity to its customer base, the ISP



also needed a reliable replication tool that could move their data between data centres.

Lastly, the customer support provided by the incumbent solution was often unavailable at a time zone suited to the New Zealand region and as a result, Trustpower had to factor in long waiting times. Sanders shared, “We're quite remote, and if we do need support, we'd like it to be pretty instant as support is a priceless lifeline in the event of a crisis.”

The Veeam-ExaGrid Solution Offers Better Data Availability

After more than 10 years of using Veeam solutions in his previous roles, Sanders was confident in Veeam's backup performance, especially in virtual environments. He introduced Veeam to Trustpower's ISP business, initially only as a backup solution but later as a replication tool as well. Veeam now safeguards the ISP's mail system and other critical services that run on over 50 virtual servers.

Sanders elaborated, “One of the great benefits of Veeam is its granularity in backup – I can restore entire virtual machines or drill into backup images to restore files – for example, pulling out individual mailboxes or messages from our mail platform backups very easily. So, if any of our customers accidentally deletes important email, we can help them restore it.”

To store and protect the ISP's main production data, Trustpower chose a mixture of Pure Storage and HPE Nimble for their primary storage, as both vendors were validated by Veeam and integrated well, allowing Sanders's team to do snapshots and restores seamlessly. Similarly, for the secondary storage of backup data, Trustpower wanted a Veeam-validated system that would also work well with VMware.

In 2018, Sanders attended the VeeamON Forum in Auckland where he met an ExaGrid representative who explained how ExaGrid's backup solution integrates seamlessly with Trustpower's existing virtual environment and Veeam backup system. Trustpower was assigned an ExaGrid support engineer to take Sanders and his team through the evaluation and installation process, offering close regional support throughout installation and through the life of the product. ExaGrid provides a support package in each time zone, which includes responsive support from a level-2 engineer, opt-in remote system monitoring, next-day shipping of hot-swappable hardware replacements, and free software upgrades.

By implementing the Veeam-ExaGrid solution it enabled Trustpower's ISP ICT team to establish a nightly backup schedule and convert geographically diverse passive sites into active sites that cross-replicate backups for greater data protection. Data is backed up to the local ExaGrid system and then cross-replicated to Trustpower's multiple sites, using ExaGrid and Veeam's replication technologies, so that data is available and recoverable from any of its sites. Sanders has tested the data restoration process and is pleased that he can recover data quickly and keep customers connected to the Internet. "I'm able to sleep better at night, with the confidence that we can restore critical services if required. After all, a backup strategy is only as good as the last validated restore," he said.

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ExaGrid writes backups directly to a disk-cache Landing Zone, avoiding inline processing and ensuring the highest possible backup performance, which results in the shortest backup window. Adaptive Deduplication performs deduplication and replication in parallel with backups for a strong recovery point (RPO). As data is being deduplicated to the repository, it can also be replicated to a second ExaGrid site or the public cloud for disaster recovery (DR).

ExaGrid and Veeam can instantly recover a file or VMware virtual machine by running it directly from the ExaGrid appliance in the event that the file is lost, corrupted or encrypted or the primary storage VM becomes unavailable. This instant recovery is possible because of ExaGrid's Landing Zone – a high-speed disk cache on the ExaGrid appliance that retains the most recent backups in their complete form. Once the primary storage environment has been brought back to a working state, the VM backed up on the ExaGrid appliance can then be migrated to primary storage for continued operation.

Sanders concluded, "Veeam and ExaGrid are the core of our backup and replication strategy. The way Veeam integrates with VMware and manipulates the virtual environment is superb.

The combined Veeam-ExaGrid solution has cut our backup times in half, and the seamless movement of data between our data centres has been invaluable to the company. I wouldn't be comfortable with any other product combination for backup and replication in our environment."

"Our solution now is completely VMware, Veeam, and ExaGrid. It's solved our problems and with the success of this roll-out, we plan to replicate this infrastructure more widely across our business network," said Sanders.

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.

