

Ballance Agri-Nutrients uses a Pure Storage® FlashArray™ to improve the performance of SAP® and other key applications, deliver better outcomes for customers, and radically streamline storage management.



BUSINESS TRANSFORMATION

Customer-owners see accelerated response times on an innovative farm-management portal. VDI performance is noticeably faster, and the IT staff has virtually no demands for storage management.

REGION / COUNTRY

APJ / New Zealand

INDUSTRY

Manufacturing / Agriculture

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Tim Lloyd, *IT Operations Manager*

BALLANCE AGRI-NUTRIENTS ADDS NOURISHING ALL-FLASH ARRAYS FROM PURE STORAGE

Ballance Agri-Nutrients is a farmer-owned cooperative that is New Zealand’s largest producer and distributor of fertilizer and other nutrient products for use on soil and animals. In 2018, it sold 1.64 million tonnes of product, and its nearly 19,000 shareholders received a rebate of \$45/tonne, reflecting both strong sales and efficient operations.

“Our mission is to provide a reliable source of high quality nutrients, as well as scientifically sound advice, to help our farmer-shareholders achieve maximum efficiency and sustainability out of their land and animals,” observed Tim Lloyd, IT Operations Manager for the cooperative. Lloyd and Ballance’s Chief Digital Officer David Scullin, are leading a major digital-transformation initiative to help member farmers be “future ready.”

This effort involves linking disparate data sources to give farmers visibility on planned-vs.-actual expenditures and farm sustainability. Integrating other sources of information such as geospatial, soil and weather data allows Ballance to begin benchmarking farm performance levels per farm or region, creating new data-driven business opportunities and setting the stage for the next phase of “connected agriculture” with Internet of Things and predictive analytics.

A key element in this effort is the MyBallance online platform, launched in 2018, which takes orders from farmers 24/7 — and much more. It allows farmers to identify a specific spreader, give them spreading instructions, and showing where nutrients have been applied, to support environmental reporting. Other features under development include decision-support capabilities to maximize the efficiency of fertilizer use, improved inventory management, soil-test dashboards, and interactive planning tools.

Ballance operations are run almost exclusively on SAP software, and in 2018 Ballance won a “Best Run” award in the annual SAP Innovation Awards competition for its MyBallance platform, which runs on Pure Storage, as do all the company’s application servers.

HIGH-PERFORMANCE STORAGE A KEY REQUIREMENT

The cooperative’s forward-looking digital initiatives require an advanced IT infrastructure. This includes virtualized HPE servers using VMware vSphere, Citrix desktop virtualization, Microsoft Exchange, and “the full stack of SAP,” for enterprise resource planning, customer relationship management, supply-chain management, financial and other key

COMPANY:

Ballance Agri-Nutrients
ballance.co.nz

USE CASE:

- Virtual Server Infrastructure – VMware® vSphere®
- Virtual Desktop Infrastructure – Citrix®
- SAP® – ERP, CRM, e-commerce, supply chain
- Database – Microsoft® SQL Server
- File servers

CHALLENGES:

- Legacy storage was at the end of life and was exhibiting high latencies.
- Complexity of storage management taxed the resources of a small IT staff.

IT TRANSFORMATION:

- Performance of customer-facing web portal has more than doubled.
- Data reduction of more than 3:1 reduces storage footprint and operating costs.
- Pure Evergreen™ Storage program makes long-term costs predictable and stable.

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Tim Lloyd, *IT Operations Manager*

functions. In 2018, storage needed a refresh because it was at the end of its maintenance contract, and because it was starting to produce high latencies, negatively impacting VDI performance on key applications and database queries, and lengthening backup times.

Lloyd was both clear and concise in what his criteria were in selecting a replacement: "Good references, a good Gartner score, and a good price."

The Gartner score was a reference to the respected analyst firm's "Magic Quadrant," which assesses vendors along two axes — their "completeness of vision" and "ability to execute." Market leaders are those companies that score high on both metrics, placing them in the upper-right quadrant. Pure Storage has been named a leader in the Gartner Magic Quadrant for Solid State Arrays for five years in a row.

"We rely heavily on what Gartner says, and if you're not upper-right, you won't get a look," Lloyd said. "The price has to be good, of course, and we want references from other customers in our country."

In collaboration with his system-integration partner, Datacom, Lloyd considered several options for new storage. "We initially were going to just replace our Nutanix (hyperconverged infrastructure), but then we also looked at 3PAR and Nimble. But Gartner said Pure Storage was the best for all-flash, so we had them in."

As for references, Lloyd talked to several companies in New Zealand who were users of Pure Storage, asking them three simple questions: "Are you happy; would you buy again? Does it do everything they said it would do? And, how easy is it to implement and use?" The responses from everyone he talked to "were remarkably similar. It was a resounding yes to every question, which was quite encouraging."

In the end, Lloyd said, Pure Storage passed what he called a "proof of value" test: "If you meet all our expectations, we will buy from you." And that's exactly what happened.

Ease of operation was a high priority for Lloyd, who is part of a small IT team. "The Pure Storage array replaced an EMC VNX system, which at the time was one of the best you could buy. It ran well, but you had to be an engineer to run the thing."

EASE OF USE EVIDENT FROM THE BEGINNING

Ballance purchased a FlashArray//M20 and put it in its primary data center in Auckland. The installation "was a pleasure to experience," he recalled. "Literally the hardest thing to do was to get it out of the box."

Data migration was equally fast and easy. "It was 1 p.m. on a Friday and I decided to migrate all the servers myself," Lloyd recalled. "I went into vSphere, right-clicked vMotion, and off we went. One of my guys was shocked when he saw 100 servers migrating all at once." Virtually all of the cooperative's 500-plus virtual machines were migrated in an afternoon.

The impact on operations from the new storage also was immediate. "When I saw what Pure Storage did for the performance of our Citrix VDI, I knew we had to get the rest of our production workloads onto it. Pure has been instrumental in improving our customer experience. Users of MyBallance were among the first to see a difference. The interactive map they use is quite hard on the database, but with Pure behind it, the performance is at least twice as fast."

Pure Storage also has satisfied another of Lloyd's key criterion — ease of use. "It's been so nice not having to think about all the complexities than came with legacy storage," he said. "With the increasing complexity of IT, it's nice to know that your storage is rock-solid and you don't have to touch it. It's literally set it and forget it. In addition, the interface is great; very easy to access all the information you need."

"Anything that makes my life easier and is more cost-effective for the business is of high value. And that is exactly what Pure Storage delivers."

Tim Lloyd, *IT Operations Manager*

Tapping Pure Storage's in-line deduplication and data compression features, Lloyd is now seeing data-reduction rates as high as 3.3:1, "which means I can buy less storage, saving me money up-front as well as reducing rack space and operating costs in our two data centers." Initially, Ballance saw data-reduction ratios below what Pure had promised at the time of sale, "so they met their word and gave us some more storage for free. It's just one example of how Pure stands behind its word. The integrity of what Pure offers is one of its strongest attributes."

Lloyd also is enthusiastic about the Pure Evergreen™ Storage program, which guarantees customers non-disruptive access to the latest technology and features without disruption of operations and with full protection of previous investment in Pure Storage solutions, all included in the cost of normal maintenance contract. "The beauty of Evergreen is that you don't have to re-buy a single terabyte," he noted. "You get new controllers every three years, and you know what the costs are going to be over the long-term. It's simple, easy and something I can plan for — which is not true of standard practices in the storage industry. Once every three years, I pay a nominal amount of money to Pure — which is very fair and reasonable for what you get — and I effectively get a new SAN."

Reflecting on his experience as a customer of Pure Storage, Lloyd said, "Anything that makes my life easier and is more cost-effective for the business is of high value. And that is exactly what Pure delivers."