Situation

Germany–based LEMKEN generates large volumes of data from its global agricultural technology (AgTech) fleet and business operations, all of which used to be backed up on a dedicated server. In 2020, a Trojan virus wiped out about 70% of LEMKEN’s operating data. They were able to restore from local backups, but the experience underscored the urgent need to find a secure, read-only, off-site backup solution.

Solution

Backblaze met all of LEMKEN’s data security and compliance requirements. Object Lock made data stored on Backblaze immutable using the write once, read many (WORM) model, and proof of concept testing showed high performance and fast data transfer speeds from Backblaze’s European data center. Backblaze’s partnership with Veeam, LEMKEN’s backup software, made integration seamless—as simple as turning on a TV, with no significant reconfiguration to their existing infrastructure required.

Result

LEMKEN’s IT team has greater peace of mind with an immutable backup of business critical data, including their Microsoft 365 data, stored on Backblaze in case of a breach or disaster. Backblaze’s ease of use has made the entire experience simple for the team, from their initial introduction to testing to implementation and management.
From forging plows by hand to building fleets of AI-led machines, LEMKEN has been on the cusp of farming innovation for centuries. Founded in 1780 as a small blacksmith’s shop, LEMKEN has grown to become a leading global manufacturer of agricultural machinery for soil cultivation, seeding, and crop protection. The company’s agricultural technology is innovative, versatile, and highly practice-oriented, with smart solutions that meet the agricultural challenges of today and tomorrow. LEMKEN is a family-owned business based in Alpen, Germany that operates 30+ locations and employs 1,700+ people worldwide. The company values responsibility, reliability, culture, and the future, and is guided by its vision to power technology that sustainably secures the global food supply.

All Images Provided by LEMKEN

LEMKEN Cultivates the Future of Farming With Secure Data

Good farming practices have sustained humankind for millennia. But farming equipment today would be unrecognizable to the founder of LEMKEN, a blacksmith who opened up shop over 200 years ago. Today, LEMKEN is an agricultural technology and machinery manufacturer based in Alpen, Germany, and the crux of the business is data—gathering it, using it, and most importantly, securing it.

The rise of AgTech has shown how cutting-edge advancements in technology can transform some of the world’s oldest tasks, such as weed control or crop fertilization. LEMKEN offers a suite of AI-powered technologies that complement its physical machinery, including apps that help farmers determine the correct fertilizer spread settings or control the working width of the plow.

With sophisticated technology working tirelessly in the field, LEMKEN’s equipment produces a high yield of data across the company’s global footprint, all of which needs to be efficiently managed by the LEMKEN IT team.
Backblaze made it very simple to go from proof of concept to the full solution. We didn't have to change the configuration or move to a production environment. They just gave us the storage, we moved our data, and that was it.

Ludger Demming, Head of IT Infrastructure, LEMKEN

Unearthing a New Storage Solution

In the old days, a stolen plow could be replaced with a new one. Today, stolen data is irreplaceable without the right backup solution in place. Before migrating to Backblaze B2, LEMKEN was backing up its Veeam data to an on-site dedicated backup server, including data from technology products as well as Microsoft 365 communications and files.

Then, in 2020, the company’s Active Directory system was compromised by a Trojan virus coming in through email, which wiped out about 70% of its operating data. “The only system that wasn’t compromised was the backup system, so we got lucky,” said Ludger Demming, Head of IT Infrastructure at Lemken. “That’s why we began looking for a read-only backup system to put behind our backup server. If we get compromised again, our data would be secure on a storage system that no one could access.” They also wanted the storage solution to be outside of their infrastructure, so that in the case of a breach, they could easily cut the connection to it and keep intruders out.

Demming and team began searching for a new solution online, and their new CIO recommended looking into Backblaze. Not only did Backblaze fit all their requirements, but the team was impressed with Backblaze’s ease of use. Demming recalled, “For as complex as our infrastructure is, it was very easy to understand how to implement Backblaze. And that, for me, was a major selling point.” In addition, the fact that Backblaze has a data center in the EU made it easier for LEMKEN to remain GDPR compliant.
Once a decision was made, the LEMKEN team ran a proof of concept with Backblaze. It took only two short meetings with Backblaze Solution Engineers to set up a small test environment. “Backblaze was very easy to understand and work with,” said Demming. “As easy as powering on a TV.” At the time, the team had just changed their backup software to Veeam Version 12, and as Backblaze is a certified Veeam Ready-Object and Veeam Ready-Object with Immutability partner, this made integrating their new backup and storage solutions equally simple.

Demming and team then ran some performance tests, moving data over to Backblaze and testing it. They wanted to ensure that the connection to Backblaze’s data center in Amsterdam was solid, and that data transfers were fast and smooth. The team was happy with the results and proceeded to work with software reseller SoftwareOne to purchase Backblaze B2 Reserve, a capacity-based storage bundle.

From there, implementation was simply a matter of setting Backblaze B2 as their S3-compatible storage repository in the Veeam console.

For as complex as our infrastructure is, it was very easy to understand how to implement Backblaze. And that, for me, was a major selling point.

Ludger Demming, Head of IT Infrastructure, LEMKEN

Planting a Test Bed, Then a Whole Field

“Backblaze made it very simple to go from proof of concept to the full solution,” said Demming. “We didn’t have to change the configuration or move to a production environment. They just gave us the storage, we moved our data, and that was it.”

In fact, the Backblaze integration with Veeam was so easy and the team was so eager to get their new solution up and running quickly that they decided to move forward before upgrading their local storage hardware. They’d previously thought they’d have to wait until that was in place to get Backblaze and Veeam up and running. When they later upgraded to a new HPE Apollo server, it was basically plug-and-play and no configuration changes to their Backblaze setup were needed.
Today, the LEMKEN IT team has 440TB of capacity to store data generated by the company’s products and AI technology on Backblaze. At every global office location with a server, the team is running Veeam Backup & Replication, which backs up locally onto SSD disk and also synchronizes with the HPE Apollo server located at the company’s head office. They use Veeam for Microsoft 365 to back up data from email, chat, and documents at the head office as well. Then, the central system sends data to Backblaze B2 where it’s stored immutably using a write once, read many (WORM) model via Backblaze’s Object Lock feature.

“Backblaze was very easy to understand and work with—as easy as powering on a TV.”

Ludger Demming, Head of IT Infrastructure, LEMKEN
As LEMKEN works to innovate even more aspects of farming, the company is now set up to securely store an ever-growing body of data. Backblaze provides a seamless integration with the Veeam family of products, and the B2 Reserve capacity-based plan is predictable with the exact same dollar amount year over year. Most importantly, LEMKEN now has added peace of mind from an immutable storage solution. "With Backblaze, we have a more secure environment," said Demming. "If the backup server fails, we still have access to our data. This helps me sleep better at night." And as the company expands to new locations, like their latest acquisition in South Africa, adding new streams of backup data will be as straightforward as plowing a new row of crops.

"With Backblaze, we have a more secure environment. If the backup server fails, we still have access to our data. This helps me sleep better at night."  

Ludger Demming, Head of IT Infrastructure, LEMKEN
About Backblaze

The Backblaze B2 Storage Cloud is purpose-built for ease. It offers always-hot, S3 compatible object storage that supports your workflows via third-party software integrations, APIs, CLI, and web UI. And it’s priced for easy affordability at rates a fraction of other cloud providers. Businesses in more than 175 countries use the platform to host content, build and run applications, manage media, back up and archive data, and protect and recover from ransomware.

backblaze.com

Founded in 2006, Veeam Software initially set out to focus on simplifying backups for virtual machines. Today, with products like Veeam Backup & Replication, Veeam Backup for Microsoft 365, and Kasten by Veeam for Kubernetes backup, Veeam continues to help customers own, control, and protect data in the hybrid cloud.

veeam