

Empowering Austrian farmers and municipalities to build a more sustainable future.

How **Müller Abfallprojekte** moved to a hyperconverged solution based on Lenovo ThinkSystem SR250 servers and Scale Computing HyperCore Software (HC3), boosting compute capacity by 40% and enabling complex data analytics to support demanding agricultural engineering projects.

Lenovo Infrastructure Solutions
for The Data-Centered

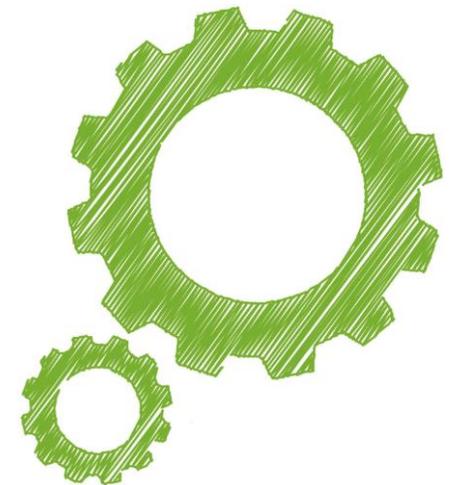
Lenovo

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Background & Vision

Engineering practice Müller Abfallprojekte GmbH focuses on sustainable projects in the agricultural and public sectors. Located in Weibern, Austria, its team of 20 people work with 285 organizations and 2,500 farmers to optimize operations, improve public infrastructure, and champion renewable energy.

Müller Abfallprojekte helps municipalities and farmers to use resources more sustainably and protect the environment. For example, the company manages and maintains renewable natural gas plants, which provide organic waste recycling and very sustainable energy to local communities.



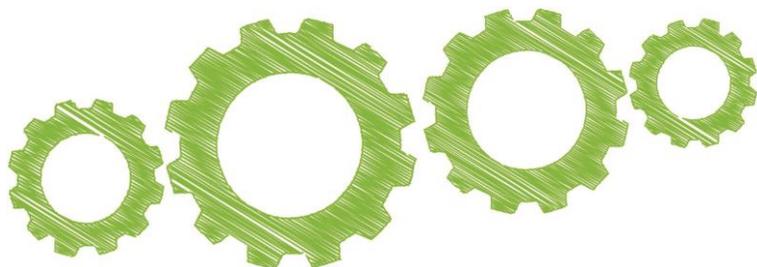
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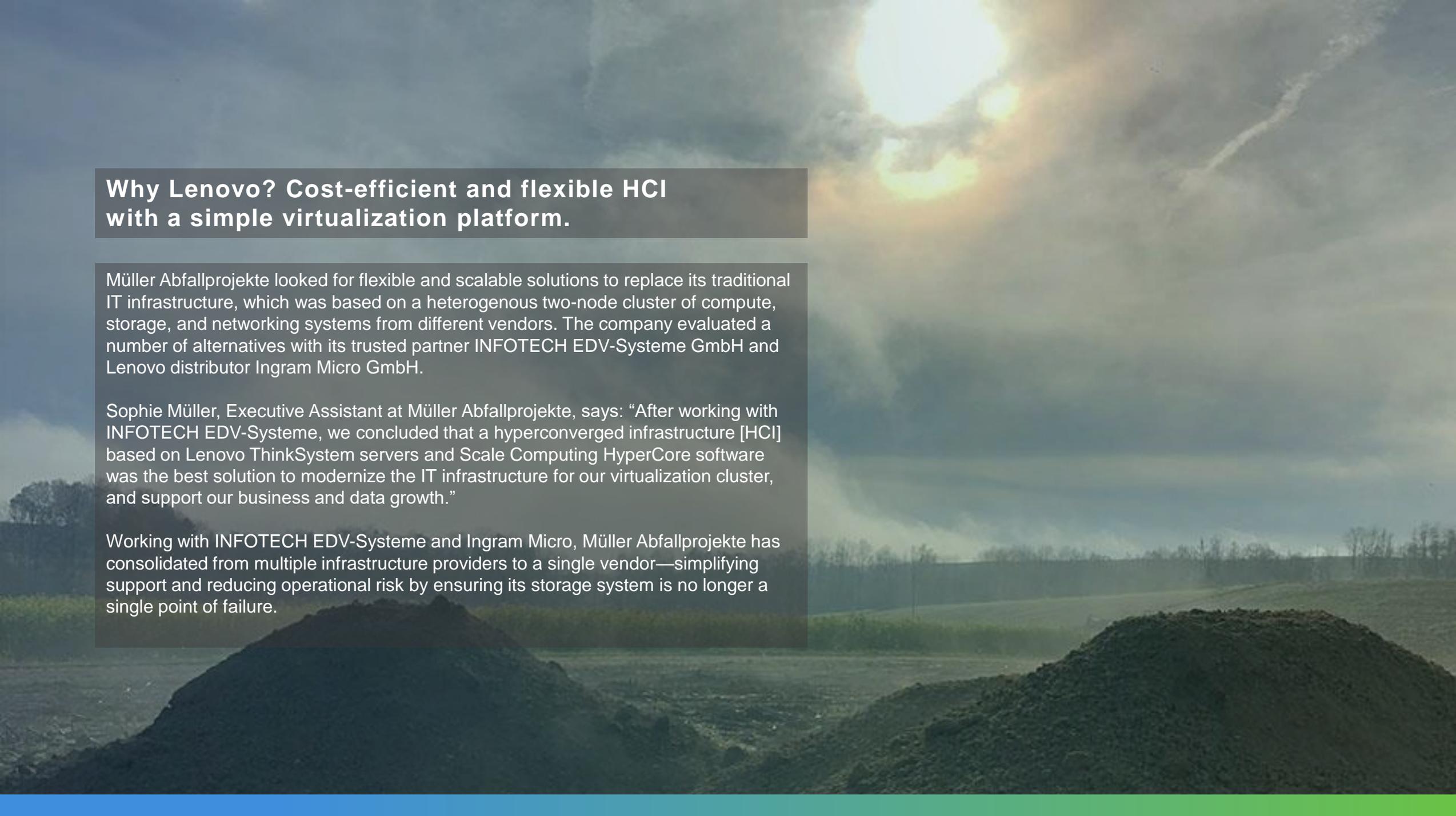
Challenge

To help achieve its sustainability goals, Müller Abfallprojekte relies on fast access to a wide range of information, ranging from reports on the quality of soil to construction plans for new infrastructure projects. Oliver Schmidt, Director for Technical Planning at Müller Abfallprojekte, elaborates: “Our staff routinely take soil samples, which we record and analyze digitally. We rely on these detailed reports to deliver solutions to our stakeholders, such as soil-improvement strategies based natural fertilizer.”

Large amounts of data are also produced in the area of infrastructure management—Müller Abfallprojekte monitors and optimizes waste-water transport through pipes and canals to maximize reliability, optimize performance, and ensure public safety and high-quality drinking water.

Data-driven systems play a crucial role in Müller Abfallprojekte’s business. With its data volumes and research projects growing steadily year after year, Müller Abfallprojekte realized that the IT infrastructure for its mission-critical virtualization cluster would soon reach capacity. During peak business periods, staff could only open three complex spreadsheets in parallel without causing system instability. To solve the challenges, the company targeted a new solution that would support its business for the long term.





Why Lenovo? Cost-efficient and flexible HCI with a simple virtualization platform.

Müller Abfallprojekte looked for flexible and scalable solutions to replace its traditional IT infrastructure, which was based on a heterogenous two-node cluster of compute, storage, and networking systems from different vendors. The company evaluated a number of alternatives with its trusted partner INFOTECH EDV-Systeme GmbH and Lenovo distributor Ingram Micro GmbH.

Sophie Müller, Executive Assistant at Müller Abfallprojekte, says: “After working with INFOTECH EDV-Systeme, we concluded that a hyperconverged infrastructure [HCI] based on Lenovo ThinkSystem servers and Scale Computing HyperCore software was the best solution to modernize the IT infrastructure for our virtualization cluster, and support our business and data growth.”

Working with INFOTECH EDV-Systeme and Ingram Micro, Müller Abfallprojekte has consolidated from multiple infrastructure providers to a single vendor—simplifying support and reducing operational risk by ensuring its storage system is no longer a single point of failure.



“Other HCI platforms were more expensive and complex. With Lenovo and Scale HC3, we can gradually expand our cluster as needed, effectively extending the lifecycle of our IT infrastructure and contributing to a greener IT strategy.”

Sophie Müller
Executive Assistant,
Müller Abfallprojekte

Delivering future-proof, easy-to-manage IT.

Müller Abfallprojekte implemented three Lenovo ThinkSystem SR250 servers with low-latency flash storage combined with high-capacity spinning disks. The company selected Scale Computing HyperCore (HC3) for its simplicity and lean resource requirements, which are up to 20 times lower than its previous infrastructure. INFOTECH EDV-Systeme migrated the company's virtual machines to the new three-node cluster, including Microsoft SQL Server instances and virtual desktops running on a Windows Remote Desktop Session Host.

“Our partners did an outstanding job,” says Schmidt. “We were particularly impressed with the support from Scale Computing. They were responsive and shared best practices to help us achieve optimal performance from our Lenovo solution.”



“The Lenovo and Scale Computing HC3 solution has increased our flexibility, enabling us to make much better use of our IT resources. Working with INFOTECH EDV-Systeme and Ingram Micro helped us to implement a greener IT strategy thanks to a highly scalable hyperconverged infrastructure.”

Oliver Schmidt,
Director for Technical Planning,
Müller Abfallprojekte GmbH

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Results

Today, Müller Abfallprojekte benefits from 40% higher compute capacity. “To protect our mission-critical systems, we used to ask staff to only open three complex spreadsheet calculations in parallel,” says Müller. “With the Lenovo and Scale Computing HC3 solution, staff can easily open eight complex spreadsheets to compare and analyze data 50% faster, which is a major productivity boost. Before, I received four support calls per week that required time-consuming troubleshooting, but now I don’t get any.”

Being able to rapidly run complex analyses against one of the largest soil databases in Austria, which reaches back 30 years, allows Müller Abfallprojekte to support regulatory bodies and facilitate data-driven decision-making. Replacing a two-node cluster with a three-node cluster has increased reliability and reduced costs. Despite more nodes, the cluster is much easier to manage—ideal for a small IT team. Before, software upgrades required manual relocation of virtual machines. Now, updates are installed automatically at the push of a button within an hour.

Running Scale Computing HC3 on Lenovo ThinkSystem servers enabled a new level of agility. “The management interface is very straightforward,” says Müller. “I could easily double the compute capacity within five minutes to optimize our virtual desktops—on the old platform, I would have relied on additional IT support.”



MüllerUmwelttechnik

- ✓ **40% increase in compute capacity enables more employees to analyze data in parallel, boosting productivity**
- ✓ **50% acceleration of complex calculations and simulations, improving service responsiveness**
- ✓ **Increases availability and reliability with a three-node cluster at a lower cost than a comparable two-node cluster**
- ✓ **Simplifies IT management and automates administration tasks**



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Oliver Schmidt,
Director for Technical Planning,
Müller Abfallprojekte GmbH

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