Thomas-Krenn case study



### **Zentrale Autoglas GmbH**

Zentrale Autoglas GmbH from Melle near Osnabrück is an owner-managed company specializing in automotive glass replacements and repairs and is the European market leader for such services with buses.

#### **Standort:**

Melle near Osnabrück

#### Mitarbeiter:

250

"The entire project fully met my expectations. The cluster arrived at our site ready to use. Commissioning with remote support was a straightforward and smooth process."

**Björn-Bastian Behnke,** Head of IT, Zentrale Autoglas Gmbl

### Unbreakable

# HIGH AVAILABILITY WITH STORAGE SPACES DIRECT FOR THE MARKET LEADER IN BUS GLASS REPLACEMENT & REPAIRS

An S2D cluster from Thomas-Krenn is providing the highest availability of mission-critical applications and greater administrative efficiency for the European market leader in bus glass repairs.

### The company

Zentrale Autoglas GmbH from Melle near Osnabrück is a specialist for automotive glass replacements and repairs and the European market leader for such services with buses. Zentrale Autoglas employees are on call 24/7 to fix buses with damaged windows or windshields. To provide this service as quickly as possible, the company has 25 locations in Germany and Austria and a sophisticated warehousing and logistics network for 12,000 different panes for nearly every type of bus imaginable.

### Always available: Also applies to IT

The company's ambitions are reflected in its IT. Absolute reliability and availability around the clock is a must for all applications related to logistics, warehousing and communication with customers and insurance companies. At Zentrale Autoglas, this applies primarily to the ERP system – a custom-made product that has grown over the years with the associated database. Moreover, there are the typical standard applications such as mail servers, terminal servers and exchange platforms for image data (damage is usually documented photographically). Most applications run under Windows on the server side. The company operates its own IT on-site and maintains a small IT department with four employees. Leading the department is Björn-Bastian Behnke, a pragmatic IT manager with broad practical knowledge in various server and storage technologies from Microsoft to open source.

It is therefore not surprising that all of the company's servers have been virtualized for many years as this better utilizes existing hardware resources and improves availability. The company was using hypervisor hosts with VMware vSphere and Microsoft Hyper-V. However, virtualized or centralized storage

had been lacking until now. Indeed, all virtualization hosts had been storing the data of their VMs locally, significantly limiting the flexibility of a virtual infrastructure over time.

# System change as an opportunity for modernization

Like many medium-sized companies, Zentrale Autoglas was faced with the decision in 2019 as to how to proceed with the IT infrastructure after support for Windows Server 2008 expired. Simply continuing with current server-OS would have been possible, but also would have represented a missed opportunity. System changes forced by manufacturer policies also offer a chance to renovate the server room and take advantage of the latest features of the newest software versions. Behnke decided to set up a central, software-defined storage system for all business-critical applications. In this age of hyper-convergence and storage virtualization, a classic SAN on proprietary hardware was immediately ruled out - its enormous costs, especially for later expansions, and lack of flexibility along with additional maintenance complexity were seen as prohibitive. It was therefore quickly apparent that the next system would involve a hyper-convergent solution. Moreover, the preliminary decision for a specific combination of software and hardware had already been made - namely a VMware vSAN cluster from a large international hardware group.

# Hyper-convergence with Windows tools

But this isn't how things worked out, thanks to a lucky coincidence: "I happened to get into a conversation with Timo Egeler, a key account manager at Thomas-Krenn, at an IT conference on a completely different topic. When he mentioned Storage Spaces Direct



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**Björn-Bastian Behnke,**Head of IT, Zentrale Autoglas GmbH



#### **About Thomas-Krenn:**

Thomas-Krenn.AG is a leading manufacturer of custom server and storage systems as well as a provider of data center solutions.

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- and S2D-certified server hardware in particular – my interest was piqued and I wanted to take a closer look," recalls Björn-Bastian Behnke. "Thomas-Krenn very quickly drew up a carefully prepared quotation, which was precisely in line with our requirements." The proposed hyper-convergent cluster consisted of four S2D series servers certified for Azure Stack HCI. Each of the 2U servers as equipped with two Intel Xeon Scalable Silver CPUs and 128 GB RAM – providing sufficient power for managing applications on the eleven Hyper-VMs and storage. Since fast cluster interconnects are critical to overall performance in hyper-convergence, the nodes also included 40/56 Gbit network cards from Mellanox. Two 40 Gbit switches provide network redundancy and ensure fast data distribution between the nodes. On the software side, licenses for Windows Server 2019 and the Veeam Availability Suite, which is now considered the data backup of choice for both VMware and Hyper-V environments.

# Storage Spaces Direct saves costs

It turned out that the functional scope of Storage Spaces Direct (S2D) in Windows Server 2019 was more than sufficient to cover the company's storage management requirements. Robust support for the hardware was also not an issue thanks to the newly certified servers of the S2D series from Thomas-Krenn. The only crucial point that remained was pricing: "Thomas-Krenn's S2D offer was clearly superior for a simple reason: We were going to need the Data Center licenses for Windows Server 2019, which S2D requires, anyway. This meant that the software for software-defined storage was virtually free," says Björn-Bastian Behnke. "It didn't take a genius to see that we could easily save 25 percent!"

# More than just hardware – a complete turnkey system

Due to the presales process, Behnke had little hesitation in awarding the contract to a medium-sized German server manufacturer instead of a so-called A-brand - even though Zentrale Autoglas had not yet used a Thomas-Krenn server. "The entire process fully met my expectations – and not just with regard to the hardware. The cluster arrived at our site ready to use. The pre-installation included everything we needed: The necessary roles and features of Windows Server were enabled, the virtual network was set up, S2D was configured with failover and so on. The commissioning, including remote support and instruction by a very knowledgeable technician from Thomas-Krenn, was a straightforward and smooth process." The failover function has also already passed its first test. The Veeam backup caused a server failure after a few days of operation due to a malfunction, but the temporary takeover by the remaining nodes and the re-commissioning of the server worked as planned.

#### **Summary**

From the point of view of the IT manager at Zentrale Autoglas GmbH, the tailor-made S2D series server cluster from Thomas-Krenn meets all expectations that a medium-sized service provider can have for a highly available, hyper-convergent system. Storage reliability increased significantly, operating costs were reduced, maintenance downtimes are no longer required and, thanks to its scalability, there is still plenty of room for further expansion. Behnke was clearly impressed: "Thomas-Krenn did everything right – from the offer with their S2D series certified servers to the entire handling of our project. We look forward to working together with the company for any future projects."