

**Specogna Bau AG**, a leading Swiss construction company, struggled to keep its employees productive when its legacy storage system could not keep pace with the demands of a growing virtual desktop infrastructure (VDI) and more graphics-intensive applications. But when its system integrator installed all-flash arrays from Pure Storage, the performance problems disappeared while storage administration was drastically reduced.



#### BUSINESS TRANSFORMATION

Employees in the head office and at construction sites have uninterrupted access to the data and applications they need to be productive, while the IT department spends 90% less time managing storage.

#### GEO

Switzerland

#### INDUSTRY

Construction

“It really was impressive how quickly and simply everything could be implemented.”

Roger Staerk,  
PrimeNet Communications AG

#### PURE STORAGE PROVIDES A SOLID FOUNDATION FOR SPECOGNA BAU'S IT INFRASTRUCTURE

Specogna Bau AG is a leading construction company in Zurich, Switzerland, that specializes in civil engineering, concrete repair, and underground construction. Every day, 85 employees access information and applications either at headquarters or remotely using a variety of devices.

In 2011, Specogna virtualized its entire IT infrastructure and has enhanced it three times since. “The VDI environment has grown over the years, and today we have twice the number of virtual workstations than we had when we started,” noted Roger Staerk of PrimeNet Communications AG, a service provider that has managed Specogna’s IT infrastructure for many years. “Each operating system and key software application upgrade increased the demands on the central hardware. We felt the consequences of this in two areas: increased maintenance work for the IT team and on end-users in terms of application responsiveness.”

Staerk reported that “employees were struggling with long wait times and higher latency times in their daily work, and the maintenance effort increased, while the performance continuously deteriorated. This was particularly noticeable with system and software updates.” The increasing performance requirements of graphic-intensive applications also impaired the agility of the VDI.

Switching from a hard-disk-based storage system to a hybrid solution brought only temporary relief while increasing the complexity of the IT infrastructure. In order to affect a long-term solution to bottlenecks in the VDI, PrimeNet endeavored to set up an extremely agile system. The requirements were: long-term economic viability, high performance, and simple management. All three criteria had to be satisfied simultaneously. Seamless integration into the existing IT infrastructure also was a prerequisite. Specogna uses VMware Horizon for its VDI. Software from Parallels functions as a connection broker and helps implement “desktop as a service”.

#### MOVING MULTIPLE KEY WORKLOADS ONTO FLASH

On the recommendation of Zibris AG, a value-added distributor that PrimeNet has worked very closely with for many years, storage solutions from several suppliers were evaluated. On paper, Pure Storage satisfied all the key requirements, leading to a decision to perform a proof of concept trial. For the pilot installation, Pure Storage provided a free all-flash array that was quickly set up in one day on a weekend.

“In order to implement a meaningful pilot installation, we migrated a number of virtual workstations and the most important application servers to Pure Storage. In eight hours, everything had been done and was running without a problem. It really was impressive how quickly and simply everything could be implemented,” Staerk commented.

**COMPANY:**

Specogna Bau AG  
[www.specogna-bau.ch](http://www.specogna-bau.ch)

**USE CASE:**

- VDI – VMware® Horizon®
- Database – Microsoft® SQL Server

**CHALLENGES:**

- Hybrid storage system suffered from declining performance.
- High latencies impeded productivity of employees.
- Legacy storage infrastructure imposed complex and time-consuming management demands.

**IT TRANSFORMATION:**

- Time required for managing the storage system and VDI maintenance reduced by 90%.
- Start-up time for all virtual workstations decreased from several hours to a few minutes.

“The name Pure fits the product perfectly.”

Philipp Steiner,  
 Zibris AG

In test operations the Pure Storage FlashArray™ satisfied all key criteria. From a raw performance perspective, the array delivered up to 100,000 IOPS. And it only took approximately 30 seconds to start 80 virtual machines simultaneously, proving that bootstorms would no longer be a problem for the company. This was in direct contrast with the hybrid storage system where a single virtual workstation required almost 55 seconds for this operation. And when all systems started simultaneously, it took almost 3½ hours before the SAN controller had processed everything. “As expected, the POC clearly showed that a company cannot ignore flash technology when it relies on VDI and wants to offer desktop-as-a-service for its staff,” observed Philipp Steiner of Zibris.

**HIGH PERFORMANCE ON ALL CRITICAL APPLICATIONS**

The benefits of high-performance storage became particularly clear during system and software updates, which used to cause severe system slowdowns. Now, updates are completed without users noticing. Thirteen application servers, plus all the virtual workstations, are now hosted on Pure Storage, and all receive maximum bandwidth even when utilization is high. Specogna has also implemented a Microsoft Exchange server and a real-time communication platform for telephony and text chat on Pure Storage.

As Specogna encourages flexible and device-independent options for its employees, including tablets and notebook computers, a test configuration demonstrated that the performance provided by Pure Storage is more than sufficient to support this initiative. “Specogna’s innovative approach to supporting its workforce has enabled us to develop a powerful storage system that masks complexity. And, above all else, it’s highly flexible. Among the many valuable features that Pure Storage includes on its platform, we find autonomous snapshotting particularly useful,” Staerk said.

**SIMPLIFIED MANAGEMENT RAISES IT STAFF PRODUCTIVITY**

In addition to delivering enormous performance improvements, the two FlashArrays installed at Specogna have reduced management requirements considerably. Administration work — which previously took 10 hours a month — now requires just one hour a month. Thanks to the straightforward and intuitive user interface, Staerk noted, the IT staff sees all the important information on the status of the storage system at a glance.

“Pure Storage is a solution which is very powerful, very simple to manage, and offers flexible scalability. We’ve made a worthwhile investment especially since it’s the best technology currently available on the market. The name Pure fits the product perfectly — it is simple and works without burdening us with unnecessary features,” Steiner added.

The Pure Evergreen™ Storage program — which guarantees non-disruptive upgrades to the latest technology as long as an array is on a support contract — “permits better planning for us as a system provider and also for the end customer,” Staerk added. “Together with the customer, we can plan several years in advance on how we meet future requirements with certainty about pricing and support.”

The experience with Pure Storage has created a very satisfied customer. “Our long-term IT partner PrimeNet Communications has once again proved its expertise by recommending Pure Storage,” said the Managing Director of Specogna Bau. “We are now ideally equipped for all the demands which the market requires of us today.”



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