



SUCCESS STORY
Healthcare



Schweizer
Paraplegiker
Zentrum

SCHWEIZER PARAPLEGIKER-ZENTRUM PROBLEM SOLVED

By moving its virtual desktop environment to a NetApp all-flash system, Schweizer Paraplegiker-Zentrum gives caregivers immediate access to clinical information to better aid paraplegic patients.

Delivering Specialized Care with Fast Access to Patient Data

Schweizer Paraplegiker-Zentrum (SPZ) is one of Europe's leading hospitals and research consortiums for spinal cord injuries. After expanding its Citrix XenDesktop environment from 20 users to more than 200 users, it required a system that would support scaling and speed, and implemented a NetApp® All Flash FAS solution.

Another NetApp solution delivered by:

DIWEGA
STORAGE | BACKUP | ARCHIVE

LOGIN TIMES
REDUCED BY

2/3

MASTER IMAGE
DEPLOYMENT TIME

5×
FASTER

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NetApp®

“With NetApp All Flash FAS, we’re saving 200 caregivers approximately 30 minutes every day that can now be spent with patients.”

Ivo Stadelmann
Head of Infrastructure, Schweizer Paraplegiker-Zentrum

CHALLENGE

Enhancing virtual desktop performance

Treating spinal cord injuries requires a holistic approach to patient care—from diagnosis and surgical procedures to rehabilitation, psychological and social therapies, and long-term care. To provide efficient, responsive, and integrated patient care, SPZ equips nurses, clinicians, and healthcare specialists with Citrix virtual desktops, which they access from thin clients at patient care stations or from remote offices. Logins must be fast, and clinical applications such as Nexus Clinical Information System (KIS) or WiCare Patient Documentation need to perform reliably so that access to vital patient information is not delayed.

“We began using virtual desktops to maximize our caregivers’ precious time with patients by allowing them to quickly access the information they need,” says Ivo Stadelmann, head of infrastructure at SPZ. “If the virtual desktops are not performing well, we cannot meet this goal.”

SPZ’s Citrix XenDesktop environment began with just 20 users. However, as the benefits of

virtual desktops became clear, it quickly expanded to more than 200 users, putting a strain on the back-end storage.

“The user experience began to degrade,” says Stadelmann. “Logins took up to a minute and a half, and clinical applications were slow during peak times—especially in the afternoon. We also needed to add 100 more XenDesktop users, but storage was a bottleneck.”

SOLUTION

Flash storage speeds access to vital information

To empower employees to provide the best possible patient care, SPZ needed to scale its virtual desktop environment reliably. It addressed the performance issues by moving XenDesktop to a NetApp All Flash FAS AFF2552 system. The solution is innovative in that virtual desktop images are automatically replicated to a NetApp FAS2240 system at a second location for disaster recovery.

“We selected NetApp All Flash FAS because it combines the speed of solid-state drives with useful software features such as

BENEFITS

- Frees 25,000 hours a year of staff time for patient care
- Helps nursing staff access information faster by reducing login times by two-thirds
- Reduces IT staff time for rollouts of XenDesktop master images, which are now five times faster
- Positions SPZ to meet new healthcare requirements for mobility
- Scales to support virtual desktop technology refreshes for users in the coming years

SCHWEIZER PARAPLEGIKER-ZENTRUM SAVES TIME WITH NETAPP ALL FLASH FAS



30

MINUTES A DAY



200

CAREGIVERS



250

WORKING DAYS PER YEAR

25,000 HOURS

 RECLAIMED PER YEAR

replication, deduplication, and data compression, which have helped us to optimize our environment,” says Stadelmann.

Diwega, a NetApp Platinum partner, assisted with the migration and provides ongoing technical support. “Diwega understands the 24/7 nature of a healthcare environment and our need for high performance,” says Stadelmann.

BUSINESS BENEFITS

Reclaiming 25,000 hours a year for patient care

With NetApp All Flash FAS, the hospital is now well positioned to expand its use of Citrix XenDesktop, helping caregivers and specialists access the information that they need at the bedside or clinic.

“Since we moved our virtual desktops to NetApp All Flash FAS,

application performance has been very consistent,” says Stadelmann. “Also, login times have been reduced by two-thirds, which is very important because caregivers log in and out of their virtual desktops many times throughout the day.” With NetApp All Flash FAS, we’re saving 200 caregivers approximately 30 minutes every day that can now be spent with patients.”

That’s 25,000 hours a year that staff can now spend on patient care rather than administrative tasks,¹ helping SPZ focus on holistic rehabilitation and comprehensive care.

Saving IT staff time

Moving virtual desktops to flash storage also helps IT be more efficient and responsive, resulting in valuable IT time saved annually.

Twice a month, the IT team updates and deploys new XenDesktop

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Ivo Stadelmann
Head of Infrastructure,
Schweizer Paraplegiker-Zentrum

¹ 0.5 hour a day × 200 caregivers × 250 working days per year = 25,000 hours reclaimed per year

master images, which used to take more than five hours but now takes one-fifth the time.

“Managing master images is much easier with NetApp All Flash FAS,” says Stadelmann. [“Now we can roll out new master images in a little over an hour.”](#) 

Meeting new mobility requirements

As desktop hardware reaches end of life, it will be replaced with virtual

desktops on thin clients, helping SPZ move toward a more mobile future.

“Mobility is the future of healthcare, not only in hospitals, but also for research,” says Mr. Stadelmann. “Within a few years, we want to equip nearly all of our employees with virtual desktops and allow them to access information securely from any device. With NetApp All Flash FAS, we will be able to achieve our mobility goals and provide great performance.”

[LEARN MORE](#)

www.netapp.com/products/storage-systems/all-flash-fas

SOLUTION COMPONENTS

NETAPP PRODUCTS

NetApp All Flash FAS AFF2552 system

NetApp FAS2240 system

NetApp ONTAP® software

NetApp SnapMirror® software

NetApp deduplication and data compression

ENVIRONMENT

Applications: Nexus Clinical Information System (KIS) and WiCare Patient Documentation

Internally developed clinical applications

Desktop virtualization: Citrix XenDesktop

PROTOCOL

NFS

PARTNER

Diwega

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