FHNW Switzerland deploys Spectra tape library in hybrid cloud infrastructure

" When we searched for a hybrid storage architecture that could deliver services to a number of different departments in the university, scalability and reduced IT maintenance costs were core requirements for our new solution. The Spectra T950 tape library helped us achieve our expected benefits from this new IT strategy. **"**

Patrick Zumstein, Corporate IT Infrastructure Department, FHNW Switzerland

Spectra T950
Tape Library
(dual frame)

n|w University of Applied Sciences and Arts Northwestern Switzerland

About the FHNW Switzerland

FHNW University of Applied Sciences and Arts Northwestern is one of Switzerland's leading universities of applied sciences and arts, actively involved in teaching, research, continuing education and service provision. The nine schools of the FHNW cover a broad spectrum of subjects and enable diverse, interdisciplinary research – addressing manifold issues from the worlds of science, business, politics, culture and society. Its broad range of degree programs; hands-on methodology; application-oriented research and global network make FHNW an appealing educational institution and a sought-after partner to industry, international universities and institutions.

The Challenge

Offering 47 different degree programs, FHNW University has been involved in thousands of applied research and development projects with industry partners. The university fulfills a fourfold mandate from the Swiss Federation and the Swiss Conference of Cantonal Ministers of Education (EDK) to provide education and training, applied research and development, continuing education, and services to third parties.

FHNW needed to improve service delivery and reduce IT maintenance costs, having opened new campuses, new courses and new policies. To manage IT services for all different departments of the university, FHNW required a new infrastructure that could enable their vision for a long-term hybrid IT strategy. The organization was looking to implement a scalable and cloud-ready platform with a fluent pool of resources that would increase performance requirements and solve infrastructure management challenges.

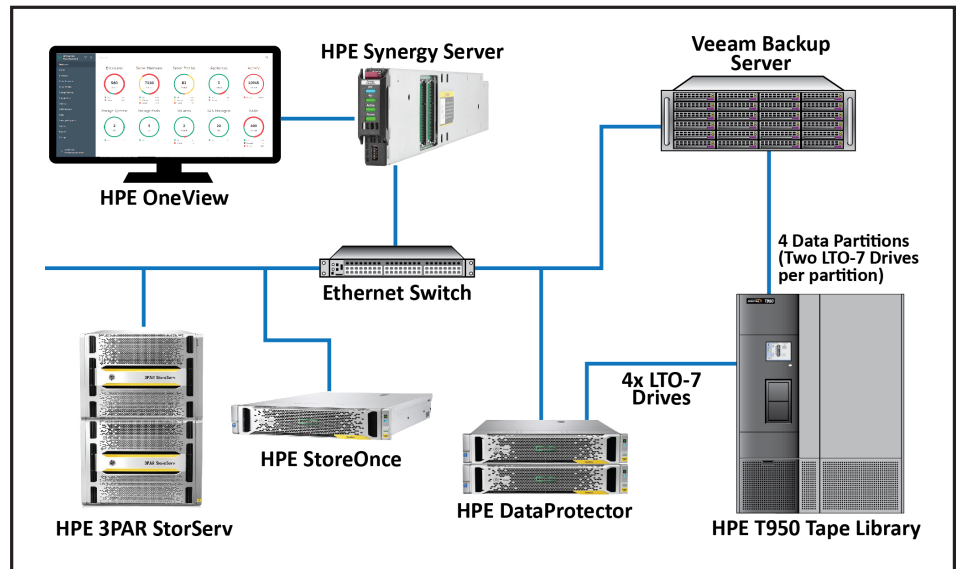*FHNW Business, Education and Engineering campus in Brugg-Windisch*

The Solution

To set the foundation for their long-term IT and cloud strategies, FHNW implemented a joint solution by HPE and Spectra Logic. The new multi-tier infrastructure includes two HPE 3PAR StoreServ all-flash arrays for tier 1 data storage, HPE's StoreOnce flash speed data protection platform for cloud-enabled backups, archive, disaster recovery and applications, and a Spectra® T950 Tape Library for scalable secondary storage.

The Spectra T950 tape library helps FHNW create a more efficient storage environment by automating the offload of cold data from their primary storage tier to Spectra's tape storage solution. Easy to use and maintain, the T950 reduces staff involvement and scales easily in capacity and throughput, meeting the performance and functionality requirements that FHNW University sought after in their new storage architecture.

The hardware components of the joint solution are managed by HPE's Synergy Composer, Data Protector and OneView software layers. The Synergy Composer software architecture displays flexible pools of compute, storage and networking in a single infrastructure. Data Protector automates backup and recovery to the tape storage target. And lastly, HPE's OneView transforms servers, storage and networking into a software-defined infrastructure to eliminate complex manual processes, spur IT collaboration, and increase the speed and flexibility of IT service delivery.

The hybrid environment will enable FHNW to deal with the fast data growth the institution is experiencing. Spectra's T950 tape library seamlessly integrates with HPE's backup software application and is compatible with most channel interfaces and networking protocols, ensuring the best possible data transfer performance. The T950 supports nearly every software package written for open systems tape, running as many as 16 applications at the same time with partitioning.

Diagram labels: HPE Synergy Server • Veeam Backup Server • HPE OneView • 4 Data Partitions (Two LTO-7 Drives per partition) • Ethernet Switch • 4x LTO-7 Drives • HPE StoreOnce • HPE DataProtector • HPE 3PAR StorServ • HPE T950 Tape Library

Environment Snapshot

- Spectra T950 Tape Library with one expansion frame
- Capacity license for 1,400 Slots
- Two 3PAR StoreServ 20850 with 48x7.68GB
- HPE StoreOnce System
- HPE StoreEver Spectra T950 Tape Library with one expansion frame
- HPE Synergy Composer
- One partition for HPE Data Protector with 4 LTO-7 drives
- HPE OneView
- Four partitions for Veeam backup with two LTO-7 drives for each partition

Why Spectra?

- Scalability
- Ease-of-use
- Integration with HPE
- Floor Space / High density

Solution Recap

Spectra T950 Tape Library – The T950 library is designed and built to meet the stringent requirements of the enterprise for data integrity, data security and high reliability. The T950 reduces staff involvement significantly, affordably scales in capacity and throughput, and supports multiple generations of current and future tape formats. For data archive, backup and recovery, this elite library leads the field in innovation. From the greatest storage density to proactive media management, the T950 is always protecting your data.

Partner Profile:

Hewlett Packard Enterprise

In the IT business for more than 75 years, Hewlett Packard Enterprise (HPE) has industry-leading positions in servers, storage, wired and wireless networking, converged systems, software, services and cloud. To help make IT environments more efficient, productive and secure, this Spectra Logic partner provides high-quality, high-value products, consulting and support services. Tightly integrated with Spectra solutions, HPE delivers infrastructure that can be easily composed and recomposed to meet shifting demands.

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