Security services provider uses Open-E DSS V7 Active-Active iSCSI Failover Storage Cluster and VMware HA

NWÜ Security is a company which provides security services, territorial and streak control services (mobile services), emergency call and service center, this includes the receipt and processing of any available protocol from the areas of security systems, video transmission / monitoring systems and all IP-based transmissions or messages, as well as special services, including e.g. the temperature control of freezers, checking of conditions until the complete remote control of a building as well as the provision of a customer-specific service telephone, which is operated 24x7x365. In addition, there is a focus on the remote control of car-free parking garages including video surveillance, receiving consoles and operation of barriers. All standard manufacturers are supported. The service can take place at any depth and also include the management of the entire property including the commercial processing. Furthermore, mobile alarm systems including motion detection, video streaming and verification via the NWÜ-NSL can be provided at very short notice. The systems are preconfigured, operated independently of power and data network at their place of use and are ready for immediate use.

What is more, the company handles NWC data center services, such as GOBD-compliant securing of POS data via secure data links, reliable backup of mission-critical data to business continuity, creation and / or retention of data carriers or NAS in the secured premises of the NWT-NSL with 24x7x365 access (business recovery) or the smart home control with connection via NWÜ firewall solutions.

Due to the complex portfolio of services and thus gathering enormous amounts of data, NWÜ Security required a failure-resistant, highly available and secure data storage solution.

OPEN-E DSS v.7

Solution

The main challenge to be overcome by the security provider was the responsiveness of the control center, which mainly provides mission-critical security and service. They had requirements for general high availability as well as for seamless hyper-availability in the case of a system-immanent problem had to be considered.

Because of the lifecycle management, an innovative and performance-oriented product selection was important as changes in the operation in a 24x7x365 landscape should not occur as far as possible. In this respect, a change in architecture from Intel to AMD based VMWare hosts (for security reasons in terms of CPU and price / performance advantage) has been accomplished in conjunction with Datacenter SSDs in the SANs. In doing so, both the expansion of possible, future-relevant GPU-intensive applications were taken into account, as well as the expandability of storage resources during operation.

After six years of using Open-E DSS V6, the insights gained in terms of product stability, performance and the uncomplicated, solution-oriented and sympathetic service provided by Open-E there was no reason to strive for a change in product and supplier. As part of the reorientation, other solutions were explored in detail (EMC, VMWare), but there was no reason for the company to change them. After careful consideration of each product the conclusion was: "Never change a winning team!"

Soon NWÜ Security decided for a transfer to the Open-E DSS V7 Data Storage Software. As for the hardware, the VMWare hosts were equipped with AMD Epyc CPUs (32 cores / 64 threads) and RAM in 64 GB modules on Supermicro hardware - as the first expansion. The Open-E systems were equipped with Intel Xeon Gold CPUs for maximum CPU clock speed and Samsung Datacenter SSDs (12 Gb / s SAS) of the latest generation. To account for performance, especially throughput, the connectivity of the systems was made over 40Gb / s network connections.

Configuration	
Motherboard	SuperMicro X11SPI-TF
Chassis	SuperMicro CSE-825TQC-R740LPB
Processor	Intel® Xeon® Gold 5122, 4-Core, 3.60GHz
RAM	48GB DDR4 RAM, 2666MHz, ECC Registered
RAID	Broadcom MegaRAID 9460-8i, 2GB Cache
SSD	5x 3.84TB SAS 12Gb/s Boot: 2x 64GB DOM (Boot)
Ethernet	2x Dual-Port 40GbE Networkadapter, Supermicro AOC-S40G-I2Q, Intel® XL710 4x Ethernet 40Gb/s QSFP+
Software	Open-E DSS V7 Active-Active iSCSI Failover Storage Cluster

VMware ESXi-Hosts	
Motherboard	SuperMicro H11DSi-NT
Chassis	SuperMicro CSE213AC-R1K23LPB
Processor	AMD EPYC 7501, 32-Core, 2.0GHz
RAM	256GB (4x64GB Modules) DDR4 RAM, 2666MHz, ECC Registered
Ethernet	Dual-Port 40GbE Networkadapter, SuperMicro AOC-S40G-I2Q, Intel® XL710
ESXi	256GB SATA M.2 2280 SSD

Hardware setup
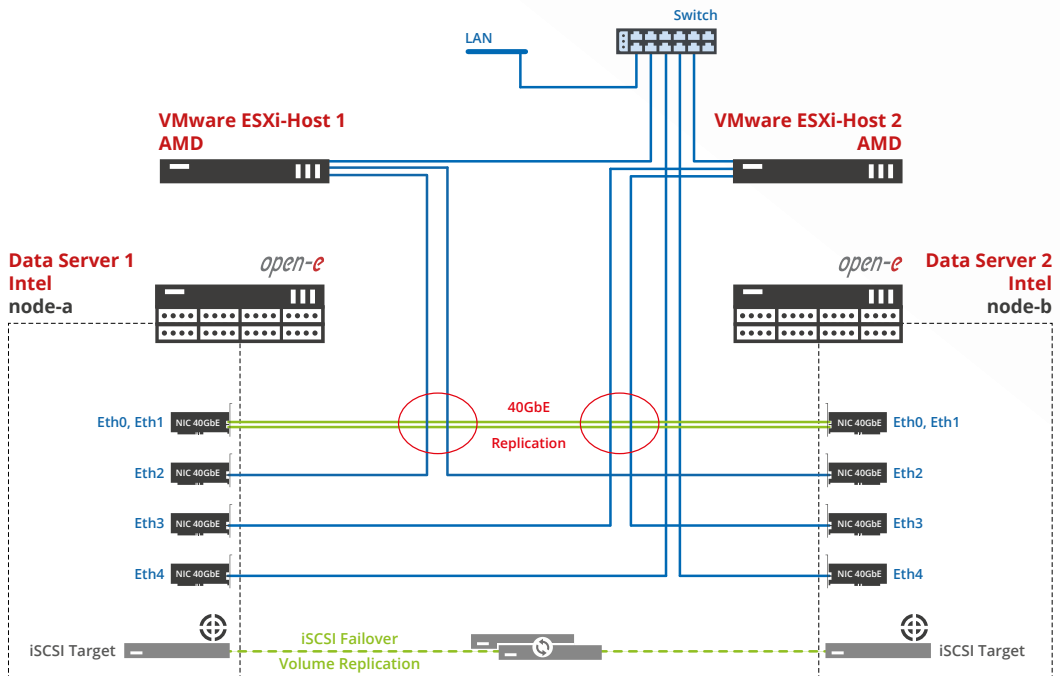
About NWÜ Security

The NWÜ GmbH & Co. KG offers an efficient, cross-industry safe solution for connecting alarm and IoT technology and operates a VDS 3138-certified emergency call and service center (NSL). In addition to a certified quality management system according to ISO 9001: 2015, EN 50518 compliant interfaces are offered.

As a differentiation from competitors, the company has been committed to a consistent digital transformation for more than a decade. Today, this enables services and complex services to be seamlessly provided and operated on a first-class level. Full virtualization of the infrastructure and operation on a highly available cluster system, including hyper availability measures, on one hand ensures outstanding failure and operational reliability and on the other hand ensures a direct response to the requirements of the diverse clientele.

In the NSL, alarm, fault and status messages from various alarm systems (intrusion, video, fire and access control systems) as well as home and building technology and all imaginable Iot applications come together, are evaluated and immediately by VdS-approved and certified NSL specialists worked - 24x7x365. The transmission can be carried out in industry-standard or individually configured ways.

The NWÜ-NSL illustrates the successful transformation of a venture from the analog to the digital age, including all process-related implications. The same standards of quality and sustainability were used as in the analogue past. For more info visit: **http://www.nwue-security.de**

About Open-E

Open-E, founded in 1998, is a well-established developer of IP-based storage management software. Its flagship product Open-E JovianDSS is a robust, award-winning storage application which offers excellent compatibility with industry standards, and is the easiest to use and manage. Additionally, it is of the most stable solutions on the market and undisputed price performance leader.
Thanks to its reputation, experience and business reliability, Open-E has become the technology partner of choice for industry-leading IT companies. Open-E accounts for over 30,000 installations world-wide and has received numerous industry awards and recognition, also with its product Open-E DSS V7.

For further information about Open-E, its products and partners, visit **http://www.open-e.com**

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