RAUSCH NETZWERKTECHNIK
www.rnt.de
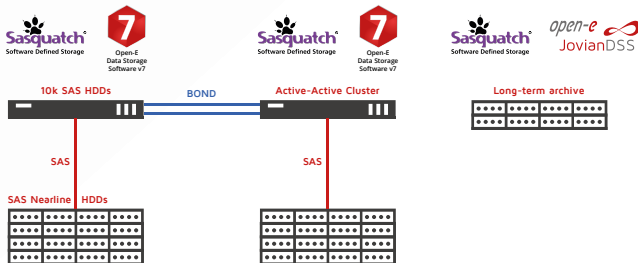
You can always count on us - today & in the future!

Data center integrates
High Availability Active-Active Cluster
and ZFS-based long-term storage

esacom deploys Sasquatch SDS | V7 Metro HA
with Open-E DSS V7 and Sasquatch SDS | ZFS Variety
with Open-E JovianDSS

The esacom data center in Germany is an IT service provider focused on Cloud services, IT services and SAP solutions for SMB customers. With privacy, availability, security and uninterrupted operations, the company offers a wide range of services – from outsourcing, service desk or monitoring to virtualization, at the same time being reliable, customer-oriented and available 24/7.

Sasquatch Software Defined Storage

7 Open-E Data Storage Software v7

10k SAS HDDs   **BOND**   **Active-Active Cluster**

SAS   **SAS**

SAS Nearline HDDs

Sasquatch Software Defined Storage   *open-e* JovianDSS

Long-term archive

esacom
Wir schaffen Lösungen.

open-e JovianDSS

Challenge

The existing storage infrastructure at esacom was based on Fibre Channel. To make the data center even more efficient, to increase data security and to offer customers more flexibility, the company planned for a re-organization. The goal was to include a connection via 10GbE to VMware ESX servers, giving data center users the opportunity to use virtual machines for their own and their customers' infrastructure. The storage systems were supposed to be divided into two fire protection zones, serving as storage for all Cloud applications.
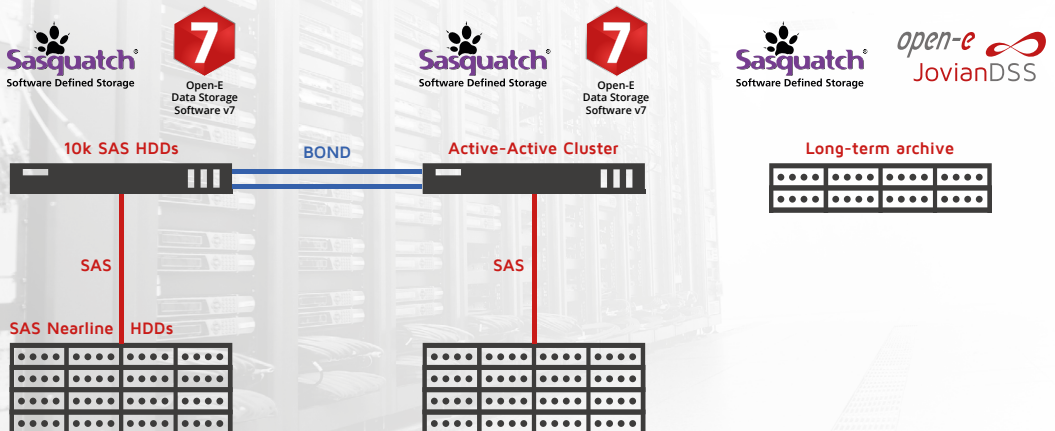
Solution

A solution was developed in cooperation with Sebastian Templin of Open-E's Platinum Partner Rausch Netzwerktechnik. Because of the various requirements for the virtual machines, a comprehensive cluster and long-term archiving concept with two storage levels was introduced. It was split into a Tier 1 level via 10K SAS drives with built-in SSD Cache for high-performance applications, and a Tier 2 level with standard virtual machines.

The virtualized storage environment was configured over both fire protection zones as an Active-Active Cluster with the software operating system DSS V7 by Open-E to guarantee synchronous replication and High Availability of all customer data. For long-term archiving, the system was to be set up with the ZFS-based software Open-E JovianDSS which enables data management in long-term storage through features such as check-summing, deduplication or compression.

Hardware-Setup
Sasquatch SDS | V7 Metro HA and Sasquatch SDS | ZFS Variety

Sasquatch
Software Defined Storage

7
Open-E
Data Storage
Software v7

Sasquatch
Software Defined Storage

7
Open-E
Data Storage
Software v7

Sasquatch
Software Defined Storage

open-e
JovianDSS

10k SAS HDDs   **BOND**   **Active-Active Cluster**   **Long-term archive**

SAS   **SAS**

SAS Nearline HDDs

Active-Active Cluster – Sasquatch SDS | V7 Metro HA	Long-term archiving – Sasquatch SDS | ZFS Variety
24-waySystem, 2U, redundant power supplies / fans and rackmount kit	12-way chassis, 8 x 2TB HDDs (12TB net 2 x RAID-Z1)
JBOD extension, 44 slots	2 x 1GbE for management, 2 x 10GbE SFP + for storage
Intel E5-1620v4 CPU, 32GB DDR4 RAM	1 x 1GbE for hardware management
4 x 10GbE SFP+ for replication and storage, 2 x 1GbE for management	32GB RAM, Intel E3-v5 CPU
LSI 12Gbit RAID controller for hybrid disks	12Gbit SAS HBA
LSI 12Gbit RAID controller for storage pool (archive)	16TB Open-E JovianDSS license incl. 3 years support
14 x 1,2TB 10k SAS disks with NAND SSD Cache (13TB net)	5 years hardware support NBD
24 x 4TB Enterprise disks (84TB net)	
2 x Dell networking N4032F switches for connection	
Open-E DSS V7 Unlimited license with Active-Active extension	
5 years Open-E support and 5 years hardware NBD (5x9) support	

Benefits

Arne Lammert, IT Manager at esacom:

"We are absolutely happy with our new storage environment. Due to the professional consulting, fast communication and a direct contact at Rausch Netzwerktechnik, the implementation was extremely convenient. With reliable meeting arrangements we were able to schedule the on-site installation perfectly and without any downtime for our customers. Our after-sales questions were addressed immediately. And all that was provided at the absolute best price-performance ratio."

About esacom

Since more than 10 years, esacom is an independent IT service provider based in Salzkotten, Germany. This is where our own data center is located. esacom was founded in 2003. In 2005, esacom transferred their business to their own building. Flat hierarchies and short communication channels are the basis of our company's structure. Highly qualified staff with extensive experience is the cornerstone of our team, including our trainees. One of our focus areas is renting out servers, processing power, IT services and Cloud services. We are offering outsourcing, hosting and housing solutions to you – specifically tailored to your needs and of highest quality. Apart from Cloud solutions we deliver special IT solutions that are available in optional packages, i.e. electronic merchandise management systems, some even for the market segment you are doing business in. Or e-mail inboxes that are accessible for all of your staff from everywhere in the world; or even audit-compliant electronic archiving of your data. And of course you will benefit from an excellent price-performance ratio. More information on **www.esacom.de**

About Rausch Netzwerktechnik

Since 1998 we consider ourselves as your reliable partner, solution provider and developer, enabling technology innovations. Organizations as well as data centers around the globe trust in our standard and individual solutions to advance their business – we have already implemented more than 250,000 systems in a precisely fitting manner. And we even go a step further: Based on hardware of our own or of our long-time partners, we chose the right software for the operation of your server or storage cluster and build tailor-made solutions –delivery, launch and support are included as well! More on **www.rnt.de/en**

About Open-E

Open-E is a well-established developer of IP-based storage management software. Open-E JovianDSS, Open-E DSS V7 and the free Open-E DSS V7 SOHO are robust, award-winning storage applications which offer excellent compatibility with industry standards, and are the easiest to use and manage. Additionally, they are some of the most stable solutions on the market and undisputed price performance leaders. Open-E accounts for over 30,000 installations world-wide and has received numerous industry awards and recognition. Thanks to its reputation, experience and business reliability, Open-E has become the technology partner of choice for industry-leading IT companies. For further information about Open-E, its products and partners, visit **www.open-e.com**