

# HYPER-CONVERGENT SYSTEM SIMPLIFIES STORAGE AND SERVER MANAGEMENT AT ACT HEADQUARTER MEDIA

## Media company moves to a VMware vSAN cluster solution

### Thomas-Krenn case study

# Act<sup>HQ</sup>

### Act HeadQuarter Media GmbH

Act HeadQuarter Media is an independent post-production house based in Cologne with a branch in Berlin.

As a full-service company, it offers a wide variety of creative and technical services for the film and television industry.

#### Locations:

Cologne, Berlin

#### Employees:

55

*„From the first consulting session to designing the system and its hiccup free commissioning, the entire project was in good hands with Thomas-Krenn from day one.“*

#### Michael Jonas,

IT Management Act HeadQuarter Media

*In the media industry, IT reliability, flexibility and scalability are paramount. At Act HeadQuarter Media in Cologne, a hyper-convergent vSAN cluster from Thomas-Krenn.AG is ensuring smooth operations.*

### The company

Act HeadQuarter Media GmbH (Act HQ) is one of Germany's largest post-production houses. The company handles post-processing tasks for TV stations and film studios including editing, color correction, sound mixing and post-dubbing. It also has a green screen studio for in-house productions.

The post-production experts are involved with various popular television shows, including „Druckfrisch“, „Kölner Treff“ and „Tatort“, as well as films such as „The Diaries of Anne Frank“.

The company is based in Cologne and has an additional office in Berlin that is rapidly expanding.

### Quick data transfers required around the clock

The IT requirements for the project were dictated by the demands of the media industry. As a service provider for broadcasters and production companies, Act HQ must ensure availability at all times – after all, the world of film and television never sleeps. Moreover, the work often involves the storage and transfer of large amounts of data. Downloads and uploads of multiple terabytes are the norm.

The infrastructure required to ensure reliable communications and efficient data exchange represents a crucial element of the company's internal IT. In addition to this, Act HQ also offers its customers supplementary digital services. For instance, the company operates an archive portal for Westdeutscher Rundfunk (WDR) on its systems. Here, WDR employees can search for keywords in trailers and TV programs via a web interface and view the material within the browser. Further, the company's IT must support numerous workstations used for A/V editing and processing as well as expansive systems

for the storage of the raw digital footage and finished productions.

These, however, these systems are organizationally independent of the IT infrastructure. The company works across multiple floors in its Cologne offices and therefore operates two server rooms. These are connected by fiber optic cables while the cabling in the respective server rooms uses copper-based cables. The entire infrastructure gives special consideration to redundancy – both in terms of its internal systems and external connections. For example, there is a failover solution that involves two different internet service providers with separate networks.

The two-person team of Michael Jonas and Michael Dudek is responsible for the infrastructure. They used server virtualization solutions to increase the flexibility of the company's IT and meet the demands stemming from staff expansion, increasing data volumes and growing functional requirements. Indeed, three web servers, two proxy servers and several virtual machines are needed solely to operate the WDR archive portal and mount corresponding file shares.

### Complete satisfaction with Thomas-Krenn

For a long time, the company was able to manage its basic communications structure with MS Exchange, Fileserver and co. running on a Microsoft Windows Small Business server purchased from Thomas-Krenn.AG in 2005. In 2012, it upgraded the server hardware and updated its software to Windows Server 2011. But as time went on, the company used up its available virtualization licenses. The rising number of virtual servers also made storage operations increasingly complex. Ultimately, Act HQ decided on a true hyper-convergent solution with integrated software-defined storage.



Michael Jonas knew from the start that Thomas-Krenn would be the supplier of choice for this task: „We noticed in the past that Thomas-Krenn's support and advice is far better than that of many other providers. Moreover, Thomas-Krenn offered us a wide range of hyper-convergent and software-defined storage solutions from various vendors and led us through an open-ended consultation that ultimately resulted in the current solution with VMware vSAN.“

The main priorities for the new system included simplified management, improved performance and scalability along with high-availability. Simply maximizing storage was less in focus, since most of the digital film material is saved on separate storage systems.

After evaluating the alternatives, including Storage Spaces Direct from Microsoft and SUSE Enterprise Storage, the company decided to go with a cluster consisting of three certified vSAN nodes with all-flash storage. Contributing to this choice was the fact that the Act HQ admins already had some VMware know-how while the seamless integration of server and storage virtualization meant that administration was simplified compared to a separate storage solution.

### **VMware vSAN: An optimal solution**

15 terabytes of storage were considered sufficient at the time of implementation and, at this volume, the additional cost for a completely flash-based solution is minimal. To further boost performance, a performance tier and cache device with NVMe storage were implemented. For backups, the company chose Veeam Backup & Replication – the market-leading software for securing virtual

environments thanks to its excellent value and solid VMware integration.

The upgrade to 10Gbit network technology represented a further boost in performance and fail-safe reliability with the networks for the clusters and external connections being physically separated. These networks are operated via four 24-port switches from Netgear, whereby each node on each network has redundant connections to avoid a single point of failure in the network.

Although the project represented a major upgrade to the server structure, the effort required from Michael Jonas was manageable: „Due to the extensive exchange with the consultants from Thomas-Krenn, our requirements were considered down to the last detail. When the hardware arrived, a detailed cabling plan was included so that we could prepare the commissioning, including assembly and external cabling. A consultant from Thomas-Krenn was with us for the commissioning and configuration and also provided some training on site. The entire configuration, including the migration of all virtual servers, was completed in about eight hours.“

### **Summary**

Michael Jonas was clearly pleased with the project experience: „From the first consulting session to designing the system and its hiccup-free commissioning, the entire project was in good hands with Thomas-Krenn from day one. We knew from experience that we could even rely on the technicians from Freyung for upcoming expansions or problems that may arise during operation as they have often provided us with quick and uncomplicated assistance in the past.“

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## **About Thomas-Krenn:**

Thomas-Krenn.AG is a leading manufacturer of custom server and storage systems and a provider of data center solutions.

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