UMEDIA

RozoFS significantly improves the performance of Umedia’s storage and provides the ability to optimize the system in real-time, enabling future growth.

Umedia, a fast-growing production group in Europe, needed a high-performance storage system to accommodate its rapid expansion. Assisted by its partner Avantcam, Umedia selected RozoFS, a revolutionary software-only solution that runs on commodity x86 servers.

HIGHLIGHTS

Industry: Media and Entertainment

Challenges:
- High performance to serve 250 clients
- Petabyte scalability; expansion without affecting production
- Ability to optimize and tune to respond to changing workloads

Solution:
RozoFS software-defined scale-out NAS deployed on Supermicro x86 servers

Results:
- Performance exceeding requirements
- Improved agility by enabling storage as a service on commodity infrastructure
- Responsiveness to users through access to key storage system information
THE CUSTOMER

Umedia is a vertically integrated, international film group with 160 staff, based in London, Brussels, Paris, Vancouver and Los Angeles. The company offers its services to international film projects, combining the activities of development, production, financing, visual effects and finishing. Since its inception in 2004, Umedia has invested more than $500 million via its tax shelter, equity and development funds, and has been involved in 350 films, including What Happened to Monday, The Exception, John Wick and multi-academy award-winning The Artist.

Umedia’s recent growth strategy has included the acquisition of TV production company Be-FILMS and independent production company Nexus Factory, as well as a first-look development deal with the award-winning prolific producer Egoli Tossell.

THE SYSTEM INTEGRATOR

Avantcam is a reseller specialized in technical equipment for the production and post-production of movies and television series. The company offers specialized software products for the technicians and artists across live production, editing & finishing, playout & delivery and post-production from leading software suppliers such as Assimilate (Scratch), Marquise Technologies (Mist), HS-Art (Diamant) and Snell Advanced Media (Rio), as well as SAN supplier Facilis Technologies.

THE CHALLENGES

Umedia has been growing at a rapid pace with its output growing from four movies in 2015 to 24 movies in 2017. It also added new television projects that require a significant amount of 3D and special effects work. The company will continue to expand in international markets over the coming years.

These projects generate a large amount of data. By late 2016, Umedia needed additional Tier 1 data storage space. With the assistance of its partner Avantcam, Umedia under the leadership of its director of IT, Julien Bastidon, started looking for a new storage solution.
Key requirements for the new system were identified:

- **Performance**: The solution is the primary storage system supporting a team of 80 artists and 150 rendering nodes running demanding applications such as Nuke and Houdini.
- **Easy Optimization**: The ability to monitor and optimize the storage system in real-time under changing workloads is critical.
- **Cost-effective**: New movies and television shows are generating huge amounts of data and Umedia is expanding to multiple locations, hence cost is a key concern. The high per-terabyte price of traditional storage solutions make them cost prohibitive.
- **Scalable**: The data stored is growing quickly, so expansion can not disrupt production work.
- **Reliable**: Production work depends on the availability of the storage system so it needs to be accessible at all times. The replacement of failing disks and servers cannot be an emergency and must be deferrable until IT resources are available.

**THE SOLUTION**

Umedia evaluated solutions from EMC-Isilon and Oracle ZFS. These solutions were found to be very expensive and lacking in performance. At this stage, Avantcam introduced the RozoFS scale-out NAS solution offered by Rozo Systems. The solution ‘checked the boxes’ for all the requirements outlined above, including a price point that was significantly lower than the competition.

Avantcam designed a system using servers from Supermicro and network equipment from Mellanox that exceeded the performance requirements of Umedia. The initial configuration included four servers with 20 disks of 6 TB each, delivering a usable capacity in excess of 300 TB. The performance was achieved using 7.2Krpm SAS hard disk drives, avoiding the need for more expensive SSDs or high-speed 10K or 15Krpm magnetic drives. The network was built
around a 56GbE Ethernet switch from Mellanox. The storage servers are installed in a
datacenter, a short distance away from the Brussels offices. The datacenter and two offices are
linked by a dark 10 GbE fiber.

THE RESULTS

The four servers were installed and underwent a brief testing period. Performance and stability
were validated so the systems were quickly inserted in the production flow. After the Rozo
support team performed network tuning, the system has reliably delivered the expected
performance to support a team of 80+ editors and 150 rendering nodes. The editing team
includes 68 artists in the Brussels headquarters and 15 artists in Paris, some 200 miles away.

“The most compelling arguments for selecting RozoFS are the outstanding
performance and the complete visibility provided in the storage system. Also, it is
backed by a very responsive support, better than anything I have enjoyed before.”

Julien Bastidon
IT Manager
Umedia

Driven by the increasing number of projects stored on the systems, the storage capacity was expanded
by the addition of JBODs. The JBODs include SAS disks of 8TB. With the JBODs, the usable capacity was
expanded to 600 TB. Further expansion is expected to grow the capacity to 1 PB usable in 2018 through
the addition of servers – that will further improve the system performance. The scalability of the RozoFS
architecture will accommodate capacities in the hundreds of petabytes, enabling the Umedia team to
grow without limitations and disruptions.

Capacity expansion of the RozoFS system is very efficient with no downtime, so little planning is
required: additional nodes and disks are easily integrated into the existing storage cluster, with optimized
rebalancing of data occurring automatically. This flexible scalability is very important for a fast growing
company like Umedia; new movie projects can be added knowing that the storage systems will not limit
their ability to successfully deliver the final results on time and on budget.

The performance and scalability of the RozoFS architecture make it possible for Umedia to keep more
media assets on the Tier 1 system. This reduces the roundtrips between the Rozo-based Tier 1 system
and the ZFS-based Tier 2 system. The result is a workflow within a single platform producing quicker
turnaround on time-critical projects.

At this time, Umedia is considering a much wider use of RozoFS in the near future.
CONTACT US

To learn more about how Rozo products, services and solutions can help solve your business and IT challenges, contact us at info@rozosystems.com or visit us at www.rozosystems.com.

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