

High-performance
Storage for Television
Broadcaster

CASE STUDY



German TV Broadcaster RTL II Accelerates Content Delivery with Storage Solutions from SGI



“With SGI we have managed to introduce tapeless workflows for in-house work with videos. It has been possible not only to cover daily business effectively but also to completely replace outdated tape technology for file saving with new technologies. The SGI solution offered many features in the green IT area as well, which fulfilled both the economic and environmental goals of this project.”

—Reinhard Görtner
Head of IT & Services
RTL II

As the requirements for IT solutions are increasing across all industries, the demands on the storage systems being used to support them are also growing. Media companies such as RTL II are especially demanding in this regard because the storage infrastructure used must ensure not only high availability but also flexible integration options. In particular the huge data volumes generated by TV productions make scalability and fast data transfer rates the top specification priorities.

As an independent private TV station offering full-schedule programming around the clock, the requirements of a storage solution for digital media content at RTL II are both clear and sophisticated: the technologies used - as well as manufacturer support—must be state of the art in order to meet the demanding IT performance requirements, given that large data volumes need to be transferred at top speeds. In addition, company-specific requirements have to be taken into account. The solution must be open in nature to support the existing heterogeneous IT environment at the TV broadcaster. Finally, scalability must be ensured so that the solution can be expanded for the growing requirements in the short, medium and long term both efficiently and cost-effectively.

"In this age of digitalization of the media and file-based working at TV broadcasters it was our aim to pursue this vision consistently and to implement it quickly and transparently for RTL II," notes Reinhard Görtner, Head of IT & Services at RTL II. "With SGI we have managed firstly to actually introduce tapeless workflows for in-house work with videos. Thanks to the high-availability hard-disk solution for the storage of all moving image content it has been possible not only to cover daily

business effectively but also to completely replace the outdated tape technology for file saving with new technologies. Secondly, the SGI solution offered many features in the green IT area which fulfilled both the economic and environmental goals of this project."

Service level agreements at the TV broadcaster define clearly and unequivocally the conditions of data transfer - where the storage system's tasks lie in the provision and delivery of rapidly changing broadcast content around the clock. At the same time, the system is used for the long-term archiving of all RTL II media content, with MAID (Massive Array of Idle Disks) technology being utilized in this case. MAID disk subsystems help users to reduce the energy and cooling costs of the storage system being employed for content, requiring only infrequent access. To achieve this, disk units that are not currently being requested can be parked and automatically restarted if there is a need to access their content.

No Real Alternative

In view of the need to modernize the storage infrastructure and the importance of this task, the station's management team opted to carry out a technological feasibility study in order to meet as effectively as possible over the long term the constantly growing demands on their storage requirements. As Hans-Josef Lauer, Chief System Administrator at RTL II notes: "After we had carefully evaluated all the theoretically possible alternatives,



"After we had carefully evaluated all the theoretically possible alternatives, we came to the conclusion that SGI would be able to implement the most comprehensive solution which was ideally tailored to our specific requirements..."

Thanks to the high reliability of SGI's products and the professional support we have recorded around-the-clock operation seven days a week for the past two years without any downtimes whatsoever."

—Hans-Josef Lauer, Chief System Administrator at RTL II



we came to the conclusion that SGI would be able to implement the most comprehensive solution which was ideally tailored to our specific requirements."

Owing to the wide-ranging and computer-intensive IT tasks at RTL II, only a highly flexible solution was worth considering. "Ultimately, SGI was the provider whose tailored solution fit seamlessly and physically into the infrastructure of the RTL computer center, while meeting all the performance requirements," Lauer continues, adding, "The flexibility of the SGI storage solution makes it easy for us to pursue corporate goals in a targeted manner, such as the development of new markets, through the delivery of our content for additional customers and applications."

As a central mass storage solution with a currently configured capacity of 2.4 petabytes, RTL II is using the SGI InfiniteStorage 11000 RAID storage system, which was designed as an intelligent storage infrastructure component and is optimized for high capacities and transfer rates of up to eight 400 MB/s fibre-channel connections.

The required performance is guaranteed by the modular, parallel processing architecture with redundant controllers as well as integrated file management technologies. Since this solution can be integrated as a plug-and-play unit into the existing SAN environments quickly and directly – even with equipment from varying manufacturers – both investment protection and scalability are ensured, with management costs and effort reduced to a minimum.

The metadata are managed via the modular SGI InfiniteStorage 220 storage solution, which as a RAID (Redundant Array of Independent Disks) system can be equipped with up to 48 disk storage drives. The host connection of this solution is possible via fibre channel or serial-attached SCSI (SAS).

More Storage, Less Work

RTL II has first-hand experience of how 'scalability' is much more than merely a marketing slogan at SGI: since the initial installation three

years ago the capacity provided by the storage infrastructure has grown from the original 600 terabytes to the current level of 2.4 petabytes. Based on this encouraging experience, the broadcaster is comfortable with the prospect of further expansion going forward.

The decision in favour of SGI met more than the TV station's technological requirements. As a welcome side-effect the operating costs were lowered thanks to reduced support spending on the heterogeneous infrastructure. A central contact is now available to provide support for the whole solution. "With SGI and its employees we have a partner by our side that meets our exacting standards with dedication and professionalism," notes Hans-Josef Lauer.

Thanks to the technologically sophisticated and efficient solution as well as the professional support provided by SGI, RTL II is able to operate and manage its high-powered storage environment with minimum staffing.

"SGI has almost committed to memory the high requirements on the storage infrastructure at our company," remarks Hans-Josef Lauer. "Thanks to the high reliability of SGI's products and the professional support we have recorded around-the-clock operation seven days a week for the past two years without any downtimes whatsoever."

About RTL II

RTL II is a German-language private TV company operated by RTL2 Fernsehen GmbH & Co. KG which offers a full schedule of programming for Germany, Austria, Switzerland and Luxembourg. The programmes are delivered via cable networks, DVB-T and satellite. The company, which was founded in 1993 and has about 150 employees, is headquartered in Grünwald near Munich, whilst news programmes are produced in Cologne. The main shareholders in RTL II are the RTL Group, the Bauer Media Group and the Tele München Group; Burda GmbH holds a stake of 1.1 percent.

About SGI

SGI, a trusted leader in technical computing, is focused on helping customers solve their most demanding business and technology challenges. Visit www.sgi.com for more information.

Corporate Headquarters

46600 Landing Parkway
Fremont, CA 94538
tel 510.933.8300
fax 408.321.0293
www.sgi.com

Global Sales and Support

North America +1 800.800.7441
Latin America +55 11.5185.2860
Europe +44 118.912.7500
Asia Pacific +61 2.9448.1463