



Customer Success Story

NetApp sets the tone for Radio Television of Serbia and EuroSong 2008



KEY HIGHLIGHTS

High availability for VDI

NetApp FAS2020 provides a reliable and stable storage platform for critical 24/7 broadcasting data.

High performance

NetApp storage helps maintain high performance levels necessary for content-rich broadcasting scenarios.

Fast backup and recovery

NetApp Snapshot technology ensures rapid and reliable backup and recovery of vital audio and video files.

PERFORMANCE OF SERBIAN TELEVISION IN THE PUBLIC EYE

Since Marija Šerifović won the Eurovision Song Contest for Serbia in May 2007 thus bringing the 2008 competition to the nation's capital Belgrade, the national broadcasting cooperation Radio Television of Serbia (RTS) had to work at top-speed to prepare everything for this musical spectacle. RTS provided the pictures and sounds for an audience of 250 million watching in 43 participating countries plus Australia and New Zealand. The broadcaster was also responsible for providing the 3,500 accredited journalists with the capability to report and broadcast in real-time using VMware Virtual Desktop Infrastructure (VDI). Faced with these challenges, the RTS realised that they would need a data storage solution that could provide the necessary stability and reliability for VMware VDI while maintaining the high-performance levels necessary in a broadcasting scenario. In addition, RTS wanted to deploy the new solution in their data center after the event.

"Hosting the Eurovision Song Contest was a great honor but also a massive logistical challenge. The eyes of millions of viewers were on our images and thousands of journalists were reliant on our virtual infrastructure for their reporting. For the IT infrastructure, this meant 100% reliability," said Srbojjub Nikitovic, Executive Director at RTS. "As we were considering consolidating and virtualizing our server and storage infrastructure anyway, the contest provided the ideal opportunity to kick start that project."

The RTS IT department evaluated a number of solutions relating to the factors reliability, disaster recovery, VDI support and cost-effectiveness. Due to the wish to deploy the solution in a larger infrastructure after the event, the ability to scale the solution in accordance with growing needs was another important factor. NetApp was the only storage provider to meet all these criteria sufficiently. In addition, NetApp also offered multi-protocol support and extensive backup, restore and recovery possibilities, allowing frequent online backups and enabling fast disaster recovery. Thanks to excellent interoperability with VMware, NetApp storage was the ideal choice for the consolidated virtualized server and desktop environment. As Srbojjub Nikitovic explains: "NetApp was simply the best choice to meet all our needs in terms of stability, disaster recovery, VDI support, cost-effectiveness, and scalability."

Mission-critical storage at the heart of RTS

RTS has two FAS2020 storage systems set up as a cluster and implemented via iSCSI in a fibre channel environment. The systems each have 4.2 TB of primary SAS disk storage for the high-performance VDI and 3.5 TB of secondary SATA storage for snapshot backup and general files. One system is located in the main RTS data center. Using NetApp SnapMirror software, the data was transferred from the main data center to the second disaster recovery system located in the other remote location Radio Belgrade 2 km away from the primary data center. Due to the 24/7 nature of a national broadcasting company, RTS relies on the

“NetApp was simply the best choice to meet all our needs in terms of stability, disaster recovery, VDI support, cost-effectiveness, and scalability.”

Srboljub Nikitovic,
Executive Director, Radio Television of Serbia

clustered environment and DR structure to guarantee its service levels. The impressive performance of the NetApp systems meant that RTS was able to provide rapid access to stored data, a vital criterion for real-time broadcasting.

In total, the RTS press room for the Eurovision Song Contest played host to over 3,500 journalists, all working with VDI – all in all a total of 229 virtual machines, running on 6 VMware ESX servers and NetApp storage. In the run up to and during the show, the press used the VDI for internet access, to write their articles using OpenOffice, view audio and video content provided by RTS and produce their reports. Data such as text files, web content and audio/video files that were generated and used via the VDI was stored and backed up on the NetApp systems. Without this data, the journalists would not have been able to produce their reports on-time or with the desired quality. Thanks to the flexible provisioning of the storage resources using NetApp FlexVol, RTS could ensure that journalists using particularly storage-heavy applications such as audio/video were allocated the capacity needed to ensure a perfect broadcasting result.

Particularly impressive for RTS was the NetApp software offering which the broadcasting company is using extensively. NetApp FlexVol and VMware Virtual Center ensure the flexible provisioning and management of virtualized storage resources according to current needs.

Important for RTS was the ability of the NetApp software tool FlexClone to replicate physical LUNs as virtual copies, making them flexibly available within the VDI without requiring additional storage space. Srboljub Nikitovic explains the practical advantages of the FlexClone software: “We were under pressure to provide instant access to shared resources while minimizing storage overhead. Thanks to FlexClone, we were able to dramatically speed up provisioning of virtual resources, thus speeding up production times for the journalists relying on our services.” To streamline resources and ensure optimal storage utilization, RTS is also using NetApp deduplication technology to eliminate unnecessary copies and reduce the amount of VD images and content.

On the day of the Eurovision Song Contest, everything went according to plan. NetApp met all requirements, enabling the journalists to store and produce high density video content in a press room environment with the flexibility more typical for larger TV and radio production studios. Srboljub Nikitovic reflects: “Journalists were surprised with the speed of the VDI and curious to know what technology was at the heart of the infrastructure as such a reliable, high-performance data delivery service was new to most of them. We received comments from all over Europe congratulating us on the most technologically advanced Press Center and the best service ever delivered at any song contest. We owe that success to NetApp.”

NETAPP AND VMWARE FOR FUTURE DATA CENTER NEEDS

After the contest, the whole IT server infrastructure was migrated to a virtualized NetApp/VMware environment starting with 200 desktops and extending to over 1,000 desktops within 12 months. RTS uses NetApp storage to store and manage not only ordinary file data such as television schedules but also, more importantly, vital radio and television content. The second system is located about a mile away in a disaster recovery site and is connected via fibre channel.

“In broadcasting, we need to store many large files in a variety of different formats and make sure they are readily available for production purposes. We saw a great opportunity to use NetApp technology to replace expansive dedicated video production equipment and also provide a complete storage solution,” said Nikitovic. “Having proved itself in the run-up to the Eurovision contest, we are confident that NetApp is the right choice to protect our vital content on a day to day basis.”

NetApp partner COMING-Computer Engineering, Belgrade who designed the solution and implemented the system, is also in charge of further development, maintenance and support for the entire project.



www.netapp.com

NetApp creates innovative storage and data management solutions that accelerate business breakthroughs and deliver outstanding cost efficiency. Discover our passion for helping companies around the world go further, faster at www.netapp.com

© 2008 NetApp. All rights reserved. Specifications are subject to change without notice. NetApp, the NetApp logo, and Go further, faster are trademarks or registered trademarks of NetApp, Inc. in the United States and/or other countries. All other brands or products are trademarks or registered trademarks of their respective holders and should be treated as such.