

UCLA

University of California,
Los Angeles
Los Angeles, California
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Laboratory of Neuro Imaging
Los Angeles, California
www.loni.ucla.edu

Industry
Education/Health Care

Benefits

- Easy installation
- No change to existing tape storage applications or infrastructure
- Proactive tape media management
- Error determination and correlation between tape media and tape drives
- Backup, archive, and HSM performance monitoring
- Ensured recoverability of data

UCLA Laboratory of Neuro Imaging Relies On Crossroads' ReadVerify® Appliance to Help Optimize Backup and Archive Operations

"Crossroads ReadVerify Appliance has provided statistical data on the health of our tape storage infrastructure and allowed us to achieve significant improvement in the performance and utilization of our backup and archival resources. We can now evaluate and optimize all of our tape storage operations, resulting in substantial performance improvements."

~Rico Magsipoc – Laboratory of Neuro Imaging Chief Technology Officer, UCLA

The University of California, Los Angeles (UCLA), is a world-class public research and academic university. As one of the university's foremost research programs, the Laboratory of Neuro Imaging (LONI) is continually developing, refining and validating neuroimaging strategies that accommodate different data acquisition methods, populations, laboratories and species. The laboratory houses a large super computer, over 100 workstations and a data archival system of over 150 terabytes to support its population-based longitudinal studies that use very high resolution, time-varying, multi-dimensional datasets of the human brain.

The IT Challenge

LONI has made a decisive move towards fault-tolerant, high-availability systems designed to ensure 24/7 functionality. For data backup and archival operations, LONI relies on two tape libraries, Sun's SL8500 and Powderhorn 9310, to store mirrored copies of the facility's offline tape data. These tape libraries are housed in two different locations, ensuring that catastrophic events in any one data center will leave a copy of all tape data intact in another data center. Twelve high-speed 40-gigabyte and two high-capacity 400-gigabyte tape drives provide LONI's tape services. This complex, high volume infrastructure, combined with rapid data growth due to

new imaging technology, is driving the need for better management of the tape storage infrastructure.

The RVA Solution

As CTO, Rico Magsipoc has been searching for innovative ways to measure the overall health and maximize the performance of LONI's backup and archive operations. The main benefits he experienced using RVA were:

Ease of Installation

Mr. Magsipoc immediately saw the value that Crossroads' ReadVerify Appliance (RVA) appliance-based design could provide. "Because of our existing tape system infrastructure, we needed a tool that would be simple to install and wouldn't require reconfiguration of any software applications. We installed RVA into our Fibre Channel SAN and within sixty minutes had it fully configured and gathering data on the health and performance of our entire tape storage system."

Tape System Monitoring and Optimization

Within weeks, information provided by RVA helped identify tape drives that were not performing to manufacturers specifications, allowing LONI to take pro-active measures to ensure their data's recoverability. "Prior to having the information provided by RVA, we

could only monitor the performance of the data storage applications. Now we have the tools to gather statistics on the entire tape infrastructure so we can really know that system performance is optimized," Magsipoc continued.

Reliable Tape Media Management

Magsipoc is also pleased that a more proactive approach to tape media management is now possible using RVA. "Instead of replacing media on a fixed schedule or upon catastrophic failure, we are now measuring error rates and removing media from rotation before it reaches its effective end of life. This helps ensure that data written to tape can be reliably read in the event of a data restore. It adds intelligence to an otherwise passive tape storage infrastructure," added Magsipoc.

In conclusion, Magsipoc says, "RVA has become an integral part of our tape operations and will remain a valuable tool as we strive to ensure long-term access to our valuable scientific information and improve the performance/ utilization of our data storage operations."

About Crossroads Systems

Crossroads Systems, Inc. (NASDAQ: CRDS), is a global provider of solutions and services that ensure stored data is proactively protected and reliably recovered. Crossroads offers organizations powerful data protection, proactive data security, intelligent storage connectivity, unmatched performance, and significant cost savings. Founded in 1996 and headquartered in Austin, Texas, Crossroads holds more than 100 patents granted and pending and has been honored with numerous industry awards for innovation in data protection and storage. Visit www.crossroads.com.



11000 North MoPac Expwy. Ste. 100 Austin, Texas 78759 866.289.2737 512.349.0300 sales@crossroads.com

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