



INDUSTRY: EDUCATION

Established in 1766, Rutgers is one of the leading national research universities. It is an outstanding, comprehensive public institution of higher education.

The university consists of 70,000 students and 23,400 full-time and part-time faculty & staff. People here along with learning, work, and serve the public at Rutgers locations across New Jersey and around the world.

The university provides for the instructional needs of the citizens of New Jersey with its undergraduate, graduate, and continuing education programs.

They conduct cutting-edge research that contributes to the medical, environmental, social, and cultural well-being of the state. This way they aid the economy and the state's businesses and industries, and perform public services too.



ABOUT ZMANDA

Zmanda is the world's leading provider of enterprise open-source backup and recovery products with over 1 million systems protected. It has been protecting enterprise data for customers in 45+ countries since 1991. It is an all-in-one solution for backup and disaster recovery that protects files, servers, and entire data centers. It is designed for companies that have an extremely low tolerance for data loss, downtime, or risk mitigation.

Some of the key features of Zmanda include-no proprietary formats, no vendor lock-ins, containerized deployments, immutable backups, global exclusion policies, client-side data duplication, and restoration of data even after the license expires. The standard features include-encryption and compression, vaulting, Al backup scheduler, automated data retention, and 24×7 support. It's also the most cost-effective product, as the charges are not based on the amount of data processed. Recently, Zmanda has partnered with leading-edge industry businesses like Opendrives, Wasabi, Amernet, Akshara, and Fronix to deliver future-proof solutions.

Problem Statement:

How did Rutgers University save tens of thousands of dollars using Zmanda Backup Solutions?

Saving money for server backups is a high priority; at least that was the case with Rutgers University when they started to explore server backup options.

Rutgers has a huge digital repository full of audio & video media files which are stored and shared globally on Isilon storage. The size of these storage spans is greater than 50–60 Terabytes. In order to store this data safely, they were using Storage and Archive Manager File System (SAMFS) backup that was provided to them by Sun Systems. However, when the Sun Systems software began to crash often, they began to explore other options. They became more inclined towards using Linux & SUSE Operating Systems. Isilon storage did not have its own proprietary backup software, thus they looked for independent backup software.

The RCA was a combination of hardware & software failure.

Customer Infrastructure and Backup Solution

Rutgers current infrastructure comprises a mix of physical and virtual machines. These machines run on SUSE Linux and SUSE enterprise. It is a mixture of SUSE 11, 4, & 12 operating systems. In addition, they also run Isilon storage, which is NFS mounted to their physical servers.

The capacity of Isilon storage is about **60 terabytes**.

The Solution: Why Zmanda As A Solution?

Being a traditional backup system, Zmanda provides benefits to the customer similar to EMC Networker and Net backup. However, the price of the other two was excessively high for the customer to afford. When compared, Zmanda turned out to be a more cost-effective solution.

The IT Team at Rutgers said:

"We chose Zmanda, as it seemed like a perfect solution for us. We could backup both the OS & storage."

How Client Benefited with an Improvised Solution with Zmanda

The customer engineered Zmanda to perform the storage backup in a traditional style. They used Zmanda to execute a full backup every month.

They implemented Amanda Enterprise and also used the MYSQL plugin.

- "Zmanda was the perfect solution for us. It was priced right and Zmanda support was excellent."
- IT System Admin, Rutgers University

The Result

Zmanda provided a more stable and comprehensive backup solution with no crashes reported since their product usage started way back in the year 2010. Rutgers was able to move from traditional dump storage to more reliant software based on full and incremental backup solutions. Zmanda also provided the customer with multiple storage solutions where the data could be stored on traditional on-premise and cloud storage.

The most standout feature of Zmanda for Rutgers University was that it provided them with immediate cost savings with an accurate backup solution and increased storage efficiency.

Spectra Logic and Zmanda Solutions

Rutgers has also depended on Spectra Logic's tape library model T50E since 2011. It is an LTO 5 tape library with two drives and is further backed by the LTO tapes. Further, there are a couple of exclusive backup sets that are saved to virtual tapes and HP storage devices, but most of the data is saved to LTO 5 tapes.



