



Daymark Solutions in Action

Successfully Managing Storage Growth with Effective Solutions and Expert Implementation

CUSTOMER PROFILE

Varian Semiconductor Equipment Associates, Inc. (VSEA) is a leading producer of ion implantation equipment used in the manufacture of semiconductors. The company is dedicated to meeting the exacting demands of IC production and satisfying the ion implantation needs of IC manufacturers worldwide. With over 3,300 state-of-the-art high current, medium current, and high energy implanters installed throughout the world, Varian Semiconductor systems have implanted about 50 million wafers — more than all of its competitors combined.

CHALLENGE

Consistent corporate growth translates into consistent data growth and Varian Semiconductor's continued success had the IT organization struggling to manage a storage environment that had expanded to 20 terabytes. Varian Semiconductor's overburdened SAN required constant IT attention to maintain performance. To backup the environment, twenty media servers shared a large tape library that had been installed to provide superior performance and reliability but actually created significant instability. A single media server running out of system resources, for example, would often bring down all the tape drives in the middle of a backup. To add to the problem, backups that started on Friday nights often extended into production time on Monday and required constant monitoring throughout the weekend.

DAYMARK AT THE HELM

The experts at Daymark helped Varian Semiconductor:

- ▼ Reduce the complexity of its backup environment to improve performance
- ▼ Redeploy existing software licenses for significant savings
- ▼ Reduce the backup window from days to hours
- ▼ Improve overall storage management, freeing IT to focus on other critical tasks

SOLUTION

Daymark Solutions' experienced professionals conducted an in-depth assessment of Varian Semiconductor's environment and concluded that the infrastructure implemented by another vendor was overly complex and incorrectly installed. The net result was an inherently fragile system that created more problems than it solved.

“Backups used to run through the weekend and into Monday or Tuesday of the following week, with failed backups needing to be restarted during business hours. This problematic environment required staff resources to provide continuous monitoring throughout the weekend. Now, after working with Daymark, we easily meet our backup windows, and our success rate commonly approaches 100%. We only have to address one-off problems, not systemic environment conditions. Best of all, we were able to implement these improvements without disrupting our ongoing operations.”

Troy Preble
Manager of Corporate
Networks and Technology
VARIAN SEMICONDUCTOR

After taking the time to understand Varian Semiconductor's short- and long-term goals, Daymark peeled back the complexity to address the stability issues. The first step was to simplify the media server environment by properly reconfiguring the tape resources, which immediately stabilized the entire backup environment. Further improvements shrank the backup window dramatically, ensuring that VSEA can comfortably meet its backup goals, with near 100% success rates. The new architecture also freed up 25% of existing device resources, decreasing the number of required licenses and dramatically reducing license and support costs.

To address the SAN issues, Daymark replaced the standalone SAN island with a multi-server, high performance, scalable Storage Area Network, enabling the introduction of a distributed file system to share the load across the enterprise. This improved performance and reduced the need for constant management, which in turn allowed the IT staff to direct its attention to other important projects.

In addition to resolving Varian Semiconductor's immediate problems, Daymark designed and implemented the new solution with an eye towards the future. Understanding Varian Semiconductor's strong desire to leverage a Data Lifecycle Management infrastructure at a later date, Daymark worked collaboratively with the company to evaluate multiple options, assisted in the selection of the most appropriate solution, and acted as an extension of VSEA's staff to ensure a smooth rollout when the time came.

Within just two weeks of initiating the project, Varian Semiconductor began to achieve the results it desired. Daymark has monitored and refined the technology post-deployment, and one year later the infrastructure continues to run flawlessly.

ABOUT DAYMARK SOLUTIONS, INC.

Daymark Solutions, Inc. is an experienced technology solutions provider focused on architecting, providing and implementing effective server, storage, network and security solutions for businesses in the Northeastern United States. Our mission is to help you use technology effectively to solve the business challenges you face today, while making sure your systems are agile enough to adapt to future requirements. For more information, call 781-359-3000.