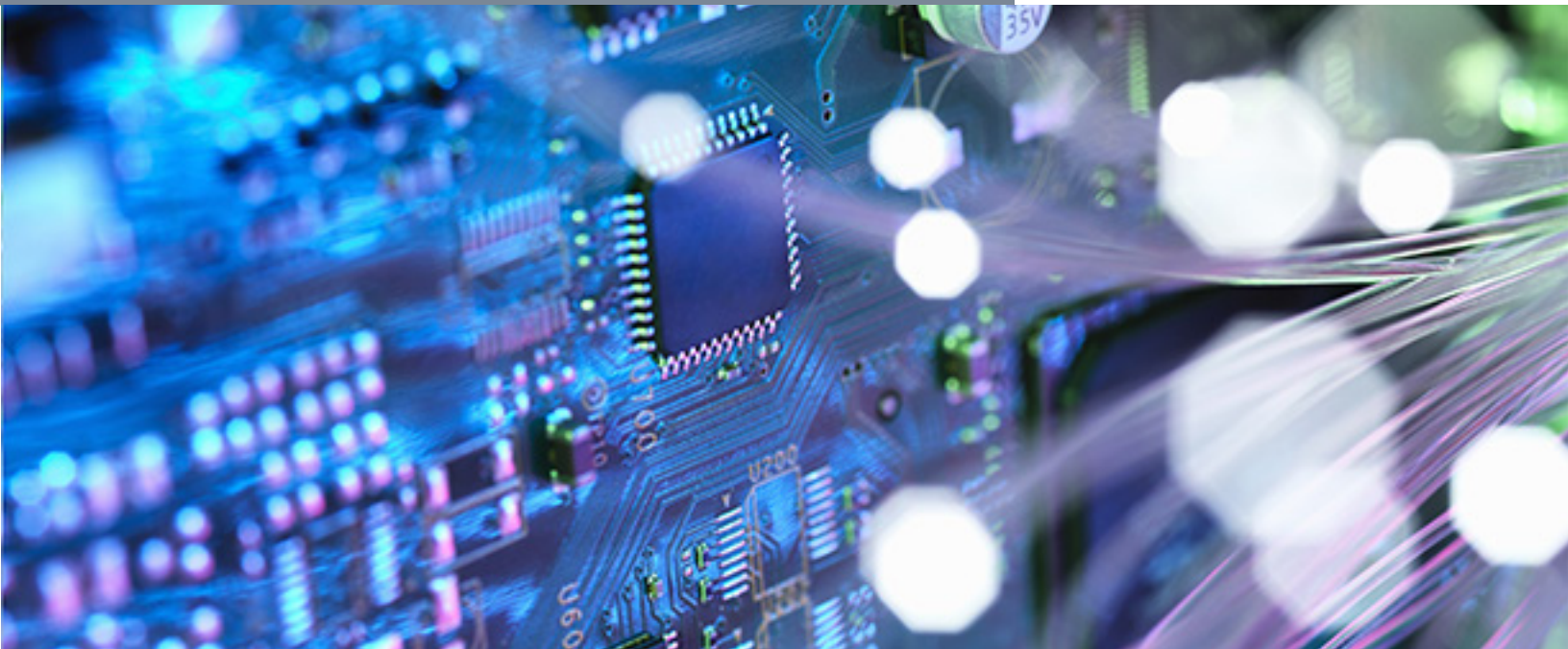


Mentor Graphics Reduces Test Time by Moving to Tintri VMstore™



Mentor Graphics Corporation is a world leader in electronic hardware and software design solutions. The company provides products, consulting services and award-winning support for the world's most successful electronic, semiconductor and systems companies.



The Challenge

Storage Systems Unable to Meet Performance Requirements

The workloads of Mentor Graphics test/dev environment were expanding, and as their development teams increased the adoption of continuous integration and continuous delivery (CI/CD), the demand on virtualized IT resources to complete testing in a timely manner also increased. Mentor Graphics moved test processes to a virtualized environment to improve agility but soon found that traditional storage solutions were unable to meet the demands of this workload.

“We tried four different traditional storage platforms and all of them were unable to meet our performance requirements,” says Brian Alexander, System Architect for Virtualization Environments, Mentor Graphics.

The Solution

Tintri VMstore Delivers Performance and Ease of Management

Mentor Graphics began looking for a storage solution that would improve developer productivity and conducted a competitive proof of concept (POC) with several vendors. At the conclusion of the POC, Mentor Graphics chose Tintri VMstore for its performance and ease of management.

“One of the biggest benefits of Tintri VMstore is its simplicity,” notes Alexander. “Some of the other vendors could solve the performance problem, but they were far more complex – making the environments difficult to manage and maintain. Tintri VMstore was the only solution that could meet both our high performance and management simplicity requirements.”

Mentor Graphics’ traditional storage was managed by the storage team and, at first, the Tintri appliance fell under their jurisdiction. However, it quickly became apparent that there was no value-add to having the storage team manage a dedicated virtual machine (VM) system, so the virtualization team took over. Mentor Graphics initially implemented one Tintri VMstore system, but eventually expanded to deploy dozens of systems. Even as the number of Tintri systems grew in tandem with Mentor Graphics’ virtualization workload, the virtualization team of six was able to manage the surge of additional systems without the need for additional headcount – helping the team save up to 95% of time that would have been spent managing storage.

“Tintri’s partnership has been key for us in several areas, especially where product integration or multiple vendors may have been involved. Tintri has engaged all parties, represented the issue or needs and ran with it, working with the other vendors for amenable resolution.”

Chad McGuire, Director of IT Architecture and Standards, Mentor Graphics

Challenges

Mentor Graphics Corporation is a world leader in electronic hardware and software design solutions. Mentor Graphics' existing storage systems could not meet the performance requirements for the test/dev environment in its expanding virtual environment.

Solution

Mentor Graphics implemented Tintri VMstore solutions for its performance and ease of management. The VMstore solutions provided simplified storage management, reduced test times and an automated test/dev environment.

Results

Reduced latencies in the test/dev environment

Ability to create and run tests on over tens of thousands of VMs per day

Ease of management without dedicated storage expertise

Provided the ability to choose any hypervisor in the future

The Results

Simplified Storage Management and Automated Test/Dev Environment

Mentor Graphics' test/dev teams are now able to create and run tests on over tens of thousands of VMs per day on a single Tintri VMstore system, far exceeding the capabilities of their traditional storage system architectures.

"Our test/dev environment is highly automated," explains Alexander. "When a software build completes, it issues a command that starts a QA run. It creates necessary VMs on demand, sends the tests to the VMs, gathers the results, deletes the VMs when the test is over, and then moves on to the next test cycle."

An unexpected benefit Mentor Graphics discovered through its use of VMstore is its ability to operate on multiple hypervisors within the same infrastructure.

"We appreciate the flexibility of not being locked into a single vendor. Tintri VMstore will allow us to run hypervisors from different vendors on the same storage platform if we choose to do so in the future," says Chad McGuire, Director of IT Architecture and Standards, Mentor Graphics.

Additionally, Mentor Graphics found Tintri Support to be top notch.

"Tintri support has been excellent," says McGuire. "We identified an issue that required some changes for our test/dev environment and were impressed with how quickly the Tintri team was able to meet a very specific request, even though our environment is not a mainstream use case for these devices."

Mentor Graphics was also impressed with Tintri's commitment to working closely with other vendors.

"We encountered a very interesting issue when we first switched over to VMstore related to cloning," says Alexander. "The Tintri team engaged directly with the other vendor and the necessary changes were made in a very short period of time."

"Tintri's partnership has been key for us in several areas, especially where product integration or multiple vendors may have been involved. Tintri has engaged all parties, represented the issue or needs and ran with it, working with the other vendors for amenable resolution," adds McGuire.

Today, Tintri VMstore is now being used as the standard across all of Mentor Graphics' environments.

"We first selected Tintri VMstore for CI/CD – it was so successful that over a couple of years, we made it our standard and replaced everything with it. From VDI, general purpose, virtualization, software development, CI/CD, and more, it was all upon Tintri," Alexander concludes.

Experience Carefree Virtual Data Management. Experience Tintri. For more information on how Tintri VMstore can turbocharge your business success, visit tintri.com/vmstore.



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