



Maximize the Benefits of Virtualizing Business Critical Applications

Remove the obstacles to virtualizing your Business Critical Applications with Violin Memory all-flash Arrays

Highlights

Application Acceleration

- Tier-1 storage for business critical applications
- Best value for your performance-demanding environments
- Full redundancy for mission-critical deployments

Application Support

- Transactional database workloads
- Latency-sensitive applications
- Virtualized server and VDI environments
- Real-time Big Data analytics
- Performance Cloud storage

Business Needs

In today's data-driven world, your IT infrastructure needs to keep your most important applications—and your business—running at full speed, whether these applications are running on physical servers, virtual machines, the cloud, or a hybrid environment.

Increasing IT efficiencies and lowering costs are the objectives that drive enterprises to explore virtualization. Enterprises have chosen to meet this goal on a select set of applications, as they are limited by the performance and economic costs of the underlying infrastructure.

Business Challenges

IT planners and systems architects must take a comprehensive approach to virtualization solutions, or they may not return the expected benefits and may even fail entirely. While servers with advanced multi-core processors and networks with low-latency, multi-gigabit per second interconnects have kept up, storage has not. Legacy storage is designed for capacity, not random IOPs, as is predominant in virtual environments.

The inability of storage systems to ensure consistent scalability and performance levels as workloads dynamically change is holding back the pace of virtualization. One key ingredient of any virtualization effort will be its supporting data storage solution.

The Violin Memory Difference

Violin flash Memory Arrays are purpose-built storage solutions that deliver unprecedented performance and scalability to solve the challenges of virtualization. Eliminate the barriers to data center virtualization with storage at the speed of memory. Violin offers a cost-effective, predictable and efficient enterprise-class storage infrastructure that enables 100% data center virtualization:

- Run mixed workloads in a shared, virtual environment while meeting service levels
- Address increased demand with unlimited storage scalability for virtual servers
- Provide integrated data protection with zero performance impact and faster recovery for virtual infrastructures

Cost-effectively Scale Your Virtual Infrastructure

A single flash Memory Array delivers up to 1 Million random I/O and does so with consistent, spike-free latency as low as 100 Microseconds. This game-changing combination of performance and sustained low-latency makes Violin's all-flash Arrays the storage of choice for high IOPS, scale-out virtual infrastructure configurations, transactional business critical applications with stringent service level agreements, as well as advanced real-time big data analytics environments.

- Up to 90% improvement in critical report generation timeframes
- 10x data processing on the same compute resources
- 6x faster response times than dedicated application systems such as Oracle Exadata, at one-third the cost

Achieve Mission-Critical Reliability

All active components in a Violin all-flash Memory Array, from the memory gateways, power supplies, array controllers all the way down to the flash memory modules have built-in, hardware controlled, redundancy and are hot-swappable. With Violin, you achieve mission-critical reliability and availability of all workloads, while improving business services.e.

Integrate Seamlessly with your Virtual Infrastructure

Violin's Storage Management Plugin seamlessly integrates with VMware vCenter, improving operational efficiencies by providing end-to-end storage management of all Violin arrays in vSphere environments. Violin's advanced storage management capabilities are available through the vCenter user interface, enabling:

- End-to-end datastore provisioning
- Centralized storage monitoring and configuration
- Scalable management for multiple arrays

Consolidate and Dramatically Reduce Total Cost of Ownership

The all-silicon Memory Arrays deliver un-paralleled performance density in a 3U rack space, replacing multiple racks of legacy storage systems. The result is a dramatic reduction in space, power and cooling costs of up to 80%.

Violin arrays' ultra-low latency eliminates the time application servers typically waste "waiting for IO" from the storage sub-system. This feature maximizes overall CPU efficiencies, reduces the need for servers, and dramatically lowers application and application license costs.

With Violin, you can support thousands of virtual machines on a single storage system at a lower \$/GB than traditional storage systems.