

# Data Protection with Violin's 7300 Flash Storage Platform

## Highlights

### Data Cloning

- For test, analysis and reporting
- Provides a complete copy at the LUN, LUN Group or Consistency Group level
- Clones can be made writable by combining with Violin Flash Storage Platform 7300 snapshot functionality
- Encryption for data-in-flight

### Mirroring

- Two identical copies
- Synchronous mirroring helps achieve Zero RPO

### Replication

- Protect production data, deliver copies for OLAP
- Synchronous or asynch depending on the need

Violin's 7300 Flash Storage Platform combines comprehensive data protection services with high performance and high resiliency in an all-flash solution for primary storage at about the same cost as legacy hard disk arrays.

### The Challenge

A survey conducted by Contingency Planning Research reports that the majority of companies estimate the average cost of losing access to data exceeds \$50,000 an hour, and for some companies that figure rises to over \$1,000,000 per hour<sup>[1]</sup>. That same study estimated that over \$18 Billion dollars of value are lost every year due to data loss.

Clearly the protection of data from loss is a critical imperative.

What would it cost in your organization? Hundreds? Thousands? Millions? Your job?

### The Solution

Violin's 7300 Flash Storage Platform combines comprehensive data protection services with high performance, high resiliency all-flash solutions that deliver up to 20x better customer experience at the cost of existing disk drive-based products. Enterprise and cloud data centers based on Violin Memory Flash Storage Platforms for their primary storage needs are easier to manage, consume less space and power and transform data center economics.

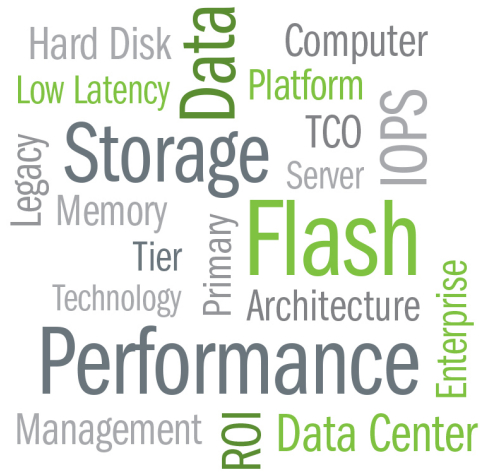
Violin's 7300 Flash Storage Platform replicated data volumes consist of two identical copies of the data. Both sides of the replication process, the primary and replica LUNS, read and write I/Os to ensure each copy is a real-time duplicate of the other.

If a server failure or user error interrupts access to the primary LUN, the replica copy will continue to service application I/O requests and therefore minimize the disruption to business users.

The Violin 7300 Flash Storage Platform synchronous replication feature helps IT managers achieve a recovery point objective (RPO) of zero lost data for critical primary storage applications.

Cloning is a different kind of operation to replication and backups in that the cloned environment is both fully functional and separate in its own right. A clone is a direct copy, bit for bit, so that the cloned data is identical to the data at the original site. Violin's 7300 Flash Storage Platform Clones are space-efficient, write-enabled copies of individual 7300 LUNs, LUN Groups or Consistency Groups.

By leveraging the performance optimization of Violin's 7300 Flash Storage Platform Snapshots, the Violin 7300 Flash Storage Platform clones additionally provide the ability to make updates to the data in the clones, without impacting the production applications.



Violin 7300 Flash Storage Platform clones offer an ideal solution to run large simulations, testing and bug fixing on the data without impacting production. Violin Memory's browser-based management interface, Symphony, offers the ability to transform any existing Violin 7300 Flash Storage Platform snapshot into a Violin 7300 Flash Storage Platform clone and simplifies the end-to-end management of Violin 7300 Flash Storage Platform clones.

When mirroring or cloning data locally, use the Violin 7300 Flash Storage Platform's native data-in-flight encryption service to encrypt the data stream as it leaves the primary LUN then decrypt it at the replica LUN to ensure confidentiality of this exchange. Since the data exchange is very brief, the keys used to encrypt the frames or packets are not needed after the data is decrypted at the other end so they are discarded - no need to manage these keys.

The Violin 7300 Flash Storage Platform's sophisticated in-flight encryption techniques can camouflage traffic so it cannot be read or manipulated and can even disguise the fact that there is traffic flowing at all.

### The Result

Violin 7300 Flash Storage Platform combines advanced data services with high performance storage, high resiliency all-flash storage solutions that delivers up to 20x better customer experience at the cost of legacy disk drive-based computing. 7300 Flash Storage Platform provides sophisticated and comprehensive business continuance, efficiency, safety, and scalability for the primary storage requirements of the 21st Century data center.

Violin's 7300 Flash Storage Platform capabilities are easily configured, monitored and tuned via Symphony, a single pane browser-based interface capable of controlling petabytes of flash storage across hundreds of Violin Memory Flash Storage Platforms at a granular level. Symphony revolutionizes the storage management experience with granular, real-time, SLA-based data protection management, data efficiency reporting, health monitoring, and customizable dashboards, all under centralized management and administration.

Symphony enables one click monitoring and management of Violin Memory Flash Storage Platforms, even if they are geographically distributed across the data center, across town or across an ocean through a unified web-based user interface. For more information go to [www.violin-memory.com](http://www.violin-memory.com)

[1] See Contingency Planning Research, 2001 Cost of Downtime Survey, <http://www.contingencyplanningresearch.com/2001%20Survey.pdf>, (2002).