Solution Brief

Flash-Enabled Snapshots for Oracle

Enterprise database systems have 24x7 availability requirements with little margin for downtime or maintenance. Yet ensuring data protection is essential for business success. What is the best way for Oracle databases and applications to be protected without impacting 24x7 operations?

Highlights

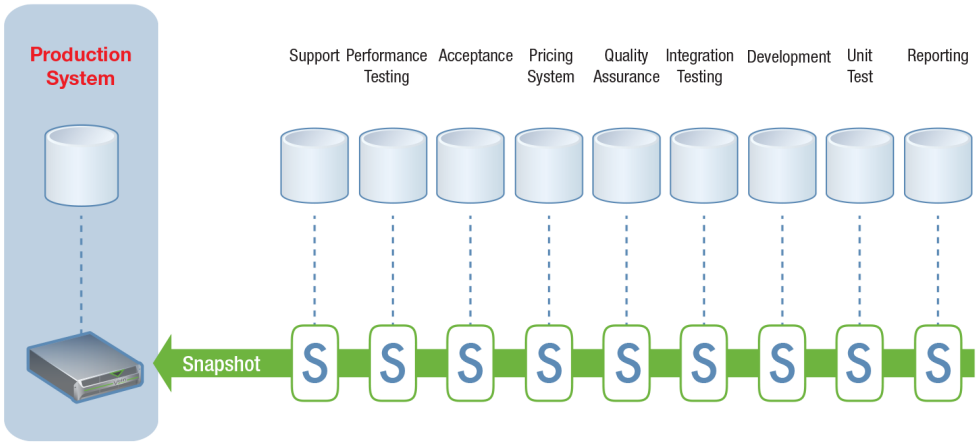
Key Benefits

- Near-instantaneous snapshots of entire databases in a flash
- Flash-optimized snapshots deliver the same ultra-low latency as production environments
- Space-efficient snapshots dramatically reduce storage requirements
- Production data is protected by offloading reporting and analytics to flash-optimized snapshots
- Improved data recoverability with support for multiple point-in-time space-efficient snapshots

With increasing data volumes and the rise of analytics, IT organizations are finding that continuous availability of their Oracle databases is essential for maintaining business continuity. As a result, IT management has to balance production data availability with application performance and prudent data protection.

Snapshots

A popular way to make production data available to non-production users is with a snapshot. Snapshots are logical views of data where any changes made are catalogued to enable users to share access to the same underlying blocks. When changes are made to the primary volume duplicate blocks are created in order to provide a coherent view of the original data at the time the snapshot was taken.



The Challenge with Snapshots

The performance of disk-based snapshot technologies is severely limited by mechanical penalties associated with seek time and rotational latency. The result is a slow snapshot.

The Violin Memory Difference

With the Violin Flash Storage Platform (FSP), you get ultra-low sustained latency regardless of the random or sequential nature of I/O. Many customers have already taken advantage of the zero contention performance of our arrays to run their businesses and. However, this transformational approach can also be applied to snapshots. The Violin FSP enables near-instantaneous snapshots to be taken of entire databases without disruption to production users. Flash-Optimized Snapshots allow customers to explore many new avenues on the road to delivering higher quality IT services at lower costs.

Violin Memory, Inc. | 4555 Great America Parkway, Santa Clara, CA 95054 USA
Tel: 1-650-396-1500 • Fax: 1-650-396-1543 | www.violin-memory.com

BE INSTRUMENTAL.

04-0419 rev 1.1r 05/16

The ability to create near-instantaneous replica copies of entire data sets to business users is transformative:

- **Offload Decision Support and Analytics Systems**
  Increase return on investment by processing more data at higher speed while minimizing the impact of refreshing data from production. Eliminate data marts to save on additional storage costs and invest the savings back into the infrastructure.
- **Improve Data Continuity and Risk Avoidance**
  Protect against faults and human errors by keeping historical data accessible. Offload resource intensive backups by mounting snapshots onto secondary servers and increase frequency for improved availability.
- **Enable Testing and Training with Real Performance**
  Equip testing teams and trainee staff to experience production performance with real-world data to run production-like workloads against snapshot copies without any degradation of primary end-user experiences.
- **Introduce Development Agility**
  Create opportunities for self-service environments to increase the agility of development, test, and training teams. By allowing multiple, space- efficient replica environments to be created through API calls, management time is reduced while development agility increases dramatically.

To review a comprehensive technical white paper on this topic, please refer to “Transforming Oracle Snapshots with Flash Memory” by Violin Memory. You can access this whitepaper and find more details on Violin Memory solutions for Oracle environments by going to http://www.violin-memory.com

To learn more about how Violin All Flash Arrays can optimize and dramatically improve your Oracle database environment, please contact your Violin Memory representative.

Violin Memory, Inc. | 4555 Great America Parkway, Santa Clara, CA 95054 USA | Tel: 1-650-396-1500 • Fax: 1-650-396-1543 | www.violin-memory.com