

PRECISE for EMC STORAGE

Transaction Performance Management for EMC Storage

Eventually, all application transactions access storage. From simple file requests to complex multi-table database joins, efficient data input/output (I/O) plays a critical role in an application's performance. When storage is slow, application performance is compromised and end-user productivity or business processes suffer. Traditional performance improvement efforts have focused on buying faster servers, or optimizing application or database code. While effective, these methods are expensive and time consuming and often only serve to cover up the root of the problem: storage performance bottlenecks.

Storage Performance: A Growing Problem

Storage is critical to the performance of the entire business transaction stack, often accounting for up to 75% of transaction performance time. Companies have adopted storage tiering to optimize storage availability for cost. This has resulted in storage arrays that do not meet the transaction performance demands of the critical business applications they serve. Application owners and storage administrators alike now understand that good device I/O per second and data availability does not equal good business transaction performance.

To an application owner, storage can be a black box. To the storage administrator, business requirements and priorities are similarly difficult to determine. This lack of transparency between business and IT, along with a lack of comprehensive storage performance management tools, makes understanding the effect that poor storage performance has on application performance difficult.

Managing storage for availability, cost AND performance is the new imperative. To deliver high availability and high performance at the lowest cost requires storage to be transaction aware.

Precise for Storage

Precise has partnered with EMC to develop a comprehensive performance management solution. Precise for Storage maps important transactions back to the storage devices being used to quickly identify performance problems.

Benefits

» **OPTIMIZES** storage performance of critical business transactions whether OLTP, batch or B2B

» **UNLEASHES** the power of multi-core CPUs by pinpointing and resolving I/O performance issues

» **IDENTIFIES** high priority data to help cut costs through business aware storage tiering

» **ISOLATES** hot devices to help reduce storage collisions and more evenly distribute load

» **CORRELATES** performance problems for one application, transaction or device with other transactions to avoid collateral damage

» **SUPPORTS** Symmetrix and CLARiiON via the EMC Solutions Enabler for Oracle, SQL Server and DB2

Designed for non-intrusive monitoring of heterogeneous production environments, Precise for EMC Storage reports directly on end-user response times, and correlates transactions with storage performance information as it is measured on each storage device.

By correlating business transactions with physical devices, Precise for EMC Storage helps customers understand and optimize their existing storage assets.

The information collected also helps accelerate the resolution of storage performance problems. Precise maps transactions back to the storage devices, files, database objects, SQL statements, and applications they access, providing administrators with the actionable information they need to quickly diagnose and resolve the problem.

TPM Solutions for Storage

IDENTIFY AND AVOID STORAGE COLLISIONS

A frequent cause of performance problems, storage collisions occur when multiple applications access the same physical storage at the same time or when two or more heavily used files are both located on one physical disk. By tracking transactions all the way down to physical storage, Precise for Storage identifies “hot” devices, allowing administrators to relocate files as necessary.

BRING BUSINESS AWARENESS TO STORAGE TIERING

Storage tiering is the process of allocating storage based on the value and performance sensitivity of enterprise data. High priority / frequently accessed data is placed on higher performance (and therefore more expensive) devices.

The need for transaction aware storage is even more urgent due to the introduction of solid state disks (SSDs), also known as Enterprise Flash Devices (EFDs) that provide high speed storage (Tier 0). To maximize return on investment, ultra-fast EFDs must be allocated to the most performance sensitive business transaction and applications.

UNLEASH THE POWER OF MULTI-CORE CPUs

Gartner estimates that only 18% of total CPU capacity is being used across the Data Center. Why is this? One main reason is I/O. Your transaction is not executing when it is waiting for I/O, thus wasting your investment in large, Multi-Core CPUs.

Precise for EMC Storage will tell you exactly the response time contribution of I/O on your transactions, allowing you to eliminate storage bottlenecks to stop wasting CPU cycles.

About Precise

Precise delivers transaction transparency, fastest time to-repair and game-changing problem prevention to customers worldwide. With Precise business and IT can clearly see where critical transactions spend time and how well they are performing against business expectations, providing a whole new perspective on complex IT infrastructure.



Visit our Web site
www.precise.com

To speak with a Product Specialist
Call toll-free **1 (877) 845 1886**
within the U.S., or visit our website
to find an office nearest you.