

Simplifying Management of Microsoft SQL Servers

Sun Fire™ x64 Servers with Quest Solutions for SQL Server



Highlights

- Improve database performance by identifying and resolving performance bottlenecks
- Run large SQL databases entirely in memory with high-performance 64-bit Sun Fire™ x64 servers
- Reduce storage costs with compression and encryption tools that can reduce backup file size by as much as 95 percent
- Decrease backup and recovery windows with tools that deliver up to 70 percent faster performance than native backup and recovery tools
- Reduce operational costs by efficiently managing disk and server resources
- Improve developer and administrator efficiency with centralized administration and simplified SQL code development
- Increase control and monitoring of changes made to SQL Server databases



As SQL Server implementations become more numerous and database administrators (DBAs) take on the responsibility for many more SQL databases, it is becoming increasingly important to improve the efficiency of managing enterprise database environments. Sun has partnered with Quest Software to help you address the daily challenges of managing your SQL database environment as it grows in both volume and complexity. Sun Fire™ x64 servers combined with Quest Solutions for Microsoft SQL Server can help you increase SQL database performance while also reducing the cost of administering and operating your databases.

Challenges in managing Microsoft SQL Servers

Rapid growth and change in SQL Server deployments makes it difficult to track and manage all of the SQL databases in your environment. SQL database administrators (DBAs) are often tasked with managing up to 100 or even 150 instances of SQL Server. They face increasing pressure to keep business-critical databases performing well while also supporting non-business critical production databases. Without the right tools to accurately assess the status and relative importance of all of an organization's SQL Servers, it is nearly impossible for DBAs to effectively manage their environments.

Today's IT organizations need an efficient means to assess and manage SQL database instances and keep them performing well. In addition to delivering consistent service levels and efficient operation, IT staff must also be able to optimize SQL Server backup and recovery processes. Backups must be performed quickly and efficiently while minimizing the risk of data loss or lengthy downtimes during recovery.

Sun Fire™ x64 servers and Quest Solutions for SQL Server

The combination of Sun's x64 servers with Quest Solutions for SQL Server can help you reduce the cost and complexity of managing SQL databases.

Sun x64 servers are outstanding virtualization platforms for database applications due to their unique capacity and performance attributes. The Sun Fire X4600 M2 server, now with Quad-Core AMD Opteron™ processors, packs the power of eight processors into a compact 4RU, energy-efficient system. Supporting up to 16 GBs of bidirectional I/O, the Sun Fire X4600 M2 provides the ideal infrastructure to optimize the advanced data mining features of SQL Server. The Sun Fire X4450 server is the most space-efficient and energy efficient 4-socket 2U x64 server among tier one vendors. Now available with 6 cores of processing power, the Sun Fire X4450 is an outstanding platform for SQL Server transaction replication technologies that require high throughput. And the Sun Fire X4440 server, jam-packed with features to optimize massive virtualization and consolidation, supports with more than 1 TB of storage and twice the memory in half the size of competitive offerings—furthering the server consolidation benefits of SQL Server by complementing its built-in data compression features. These systems deliver virtualization capabilities to help your datacenter scale to several times its capacity within the same physical space.

Quest Solutions for SQL Server is a suite of tools specifically designed to ensure that all of the critical aspects of managing your SQL Server environment can be performed quickly and

efficiently. The suite includes; LiteSpeed for SQL Server, Quest Capacity Manager for SQL Server, and Spotlight on SQL Server Enterprise, as well as software tools like Toad and Quest Change Director to address the need for efficiency in SQL database development and for managing changes in your SQL Server environment.

Advanced database backup and recovery with LiteSpeed for SQL Server Enterprise

LiteSpeed for SQL Server is the de facto standard solution for backup and recovery. It provides an enterprise view of the backup and recovery environment as well as flexible options, including the ability to analyze different backup scenarios, attach files to backups, restore individual database objects, and simplify data migration to any SQL Server. The low-impact, high-performance compression technology in LiteSpeed enables users to reduce storage costs, as well as SQL backup and recovery windows. The LiteSpeed backup engine compresses data up to 95 percent, taking less than half the time required by other backup solutions. Speeds restore times can increase by up to 70 percent and it includes the ability to recover individual database objects for even faster restores during disaster scenarios.

Real-time performance diagnostics with Spotlight on SQL Server Enterprise Xpert Edition

Spotlight on SQL Server Enterprise Xpert Edition is an easy-to-use performance monitoring solution that can simultaneously monitor multiple databases in real-time without the use of an agent. DBAs can use this with Sun x64 servers to discover, diagnose, and resolve performance problems quickly and efficiently within their SQL Server environments. Real-time alerts allow you to respond more quickly to performance problems and deep diagnostics enable you

to quickly identify the root cause of an SQL Server performance bottleneck.

The Xpert tuning module resolves SQL performance issues by ensuring optimal code quality and providing indexing options. It enables DBAs to:

- See enterprise-level performance at a glance
- Identify individual servers that are the source of performance degradation
- Drill down to isolate root causes of performance issues
- Automatically analyze performance metrics for fast issue resolution
- Ensure SQL performance and automate indexing strategies

Improving storage and resource utilization with Quest Capacity Manager for SQL Server

Quest Capacity Manager for SQL Server provides an enterprise view of SQL Server resource and storage utilization, allowing you to effectively plan for future hardware requirements and ensure the most efficient use of existing assets. Using Capacity Manager for SQL Server on Sun x64 Servers, DBAs can better forecast their database capacity requirements based on current growth rates of instances, databases, objects, CPU, memory, and I/O. Users may also leverage historical data and charts using Spotlight on SQL Server Enterprise to anticipate the impact of capacity on performance.

More efficient database development with Toad for SQL Server

Toad for SQL Server is a powerful, low-overhead integrated development environment (IDE) that makes database development faster and easier. It includes administration tools to improve application code quality and to implement development best practices and coding standards.

Additionally, the software contains an SQL Server knowledge base created by industry experts. This helps ensure top-quality application code, maintain consistency, and shorten the learning curve of new SQL Server users.

Improving change auditing with Quest Change Director for SQL Server

Quest Change Director for SQL Server gives DBAs a powerful tool for controlling changes to SQL Server databases and can help make your change and release processes more transparent and manageable. It has the ability to quickly roll out real-time or scheduled database changes, and includes change monitoring and reporting capabilities to ensure proper tracking of planned or unplanned changes.

Sun Fire x64 servers

Sun Fire x64 Servers deliver high compute density in a small footprint to ease data center space, power, and cooling constraints. Powered by Quad-Core AMD Opteron or Intel® Xeon® processors, Sun Fire x64 servers offer the benefits of enterprise-class reliability, scalability, and availability in an industry-standard platform. To help simplify management of your IT infrastructure, Sun Fire x64 servers also have advanced features such as Integrated Lights Out Management (iLOM).

Learn More

Learn more about the combined offerings of Sun and Quest at: quest.com/aboutquestandsun

Find out more about Quest Solutions for SQL Server or download a trial version at: quest.com/sql-server/download-software.aspx