Intelligent Analysis of Database Performance

Production databases undergo constant change, and because real business costs are tied to their productivity, the ability to analyze and diagnose performance bottlenecks is critical. IT personnel, specifically database administrators (DBAs), must be able to proactively detect and resolve scalability and performance issues threatening productivity. As a result, they need to establish benchmarks to understand the amount of load and throughput that database systems can handle. They also need to be able to collect metrics and monitor activity around the clock to ensure high performance levels are maintained. Finally, DBAs require both real-time and historical analyses to detect issues and determine proper action plans for maintaining operational integrity and end-user satisfaction, while avoiding costly production slowdowns.

Foglight® Database Performance Analysis offers a comprehensive solution for diagnosing and tuning database workloads. Through advanced diagnostic features and specially designed interfaces, Performance Analysis transforms database performance management into a faster, easier and more efficient experience. Its historical and real-time analytic capabilities enable DBAs to establish critical system benchmarks, such as load capacity and throughput levels. If performance baselines are exceeded, Performance Analysis presents DBAs with action plans that offer an analysis of the problem and recommendations for improving the overall performance of the database. DBAs can rely on Performance Analysis to:

- Provide at-a-glance root-cause analysis through a performance management digital dashboard
- Expose bottlenecks, anomalies and application trends rapidly through sophisticated historical analysis
- Consolidate all mission-critical performance data in highly customizable reports for executive management
- Provide uncomplicated yet intelligent alerts and tuning recommendations, to enhance and accelerate the diagnosis and tuning process

Foglight® Database Performance Analysis provides deep diagnostics and intelligent profiling of Oracle and SQL Server databases.
Collection and Analysis
StealthCollect, Quest's non-intrusive and lightweight memory sampling technology, gathers performance metrics and continually analyzes this data for inefficiencies and anomalies. Data is stored in a performance warehouse for both short- and long-term historical analysis.

Intelligent Baselining
IntelliProfile provides adaptive database profiling that continually and invisibly monitors and analyzes database performance. IntelliProfile learns the signature database behavior to understand and determine acceptable ranges of activity. These calculated baselines in turn provide the comparison information needed to quickly identify changes in the performance of the database. By examining cyclical and periodic behaviors of the database and by neutralizing random anomalies, IntelliProfile adapts and grows “smarter” and more accurate as the sampling period increases. Armed with this knowledge, IntelliProfile enables fine-tuned projections of acceptable/normal ranges of activity.

Performance Advisories
Performance Analysis's advisories include a comprehensive presentation of performance categories, organized to deliver both individual alerts and coherent, step-by-step action plans that maximize database performance through context-sensitive explanations and a robust knowledgebase. At a glance, database professionals have a unified view that enables them to optimize the application workload, reduce contention, address resource bottlenecks, and identify baseline performance deviations.

Performance Dashboard
The highly configurable dashboard within Performance Analysis provides a logical starting point for any investigation of database performance and health. The home page consolidates key performance metrics, compares these values to both determined baseline activity and user-definable alert limits, as well as enables root-cause detection through performance advisories and links to the underlying data. DBAs will quickly understand the condition of their database, at a glance, without having to perform a manual analysis.

About Quest Software, Inc.
Quest Software, Inc., a leading enterprise systems management vendor, delivers innovative products that help organizations get more performance and productivity from their applications, databases, Windows infrastructure and virtual environments. Through a deep expertise in IT operations and a continued focus on what works best, Quest helps more than 90,000 customers worldwide meet higher expectations for enterprise IT. Quest’s Foglight® application management solution unifies IT services with end users and the business, resolves problems faster to reduce downtime, and lowers the operating cost of managing applications. Quest Software can be found in offices around the globe and at www.quest.com.