Quest™

Benchmark Factory
for Databases

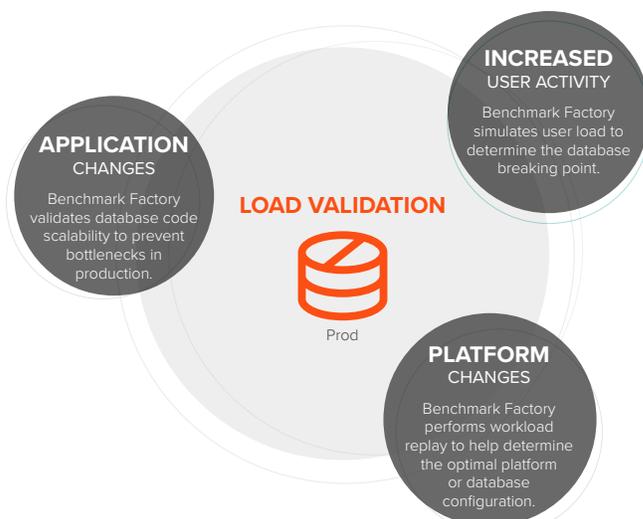## DATABASE WORKLOAD AND SCALABILITY TESTING

Benchmark Factory for Databases is a performance and code scalability testing tool that simulates users and transactions on the database. This enables developers, database administrators and quality assurance teams to:

- Replay production or synthetic activity in test or development environments

- Easily perform load tests on SQL scripts, PL/SQL, T-SQL code and stored procedures under different concurrent user configurations

- Simulate real database application workloads using out-of-the-box industry-standard benchmarks

- Determine system throughput and find database breaking points

With Benchmark Factory, organizations reduce the amount of time spent troubleshooting production issues and quickly implement new applications. Benchmark Factory is available for Oracle, SQL Server, IBM DB2, SAP, MySQL and other databases via ODBC connectivity.

Database workload generation — Take production or synthetic activity and replay it in test or development environments to simulate real-world production loads. This empowers you to understand future performance problems and do what-if analyses using actual transaction workloads.

Database code scalability testing — Perform load tests on SQL scripts, PL/SQL, T-SQL code and stored procedures under different concurrent user

> "With Benchmark Factory, we were able to diagnose and resolve potential system issues without impacting our business. The tool provided an immediate return on our investment."
>
> *Eric Herfield, Vice President and Chief Technical Architect, e-Rewards Market Research*

BENEFITS:

- Predict performance problems and intervene proactively

- Make changes with confidence using an easy, wizard-driven workflow

- Validate performance and scalability improvements through reportable metrics

- Capture workload subsets, as opposed to the entire database workload

APPLICATION CHANGES
Benchmark Factory validates database code scalability to prevent bottlenecks in production.

INCREASED USER ACTIVITY
Benchmark Factory simulates user load to determine the database breaking point.

LOAD VALIDATION

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PLATFORM CHANGES
Benchmark Factory performs workload replay to help determine the optimal platform or database configuration.

configurations to evaluate how applications perform when deployed with real activity. Benchmark Factory also integrates with Quest's SQL Optimizer products to fix any code performance issues found prior to production deployment.

Industry-standard benchmark testing — Simulate real database application workloads using out-of-the-box industry-standard benchmarks (TPC-H, TPC-C, TPC-D, TPC-E, ASP3AP and scalable hardware) to evaluate database scalability, test hardware/configurations and determine system throughput.

Virtual user and transaction load simulation — Propagates user and transaction workloads on the system under test to quantify application or server performance, determine system throughput and find database breaking points. Each user and transaction acts as a separate, independent thread with its own connection and statistics, including run times and transactions per second.

PRACTICAL APPLICATIONS

- **Evaluates Oracle Real Application Cluster (RAC) configurations to help determine the correct number of RAC nodes to deploy** — a major challenge when deploying RAC environments. By replaying real production activity, you can balance workload and evaluate scalability thresholds in already-implemented environments. Through integration with Quest's Spotlight on RAC, you have detailed performance metrics. This solution minimizes implementation and maintenance costs of Oracle RAC environments.

- **Facilitates migration to Microsoft SQL Server 2008 and 2012 and Oracle 11g and 12c**. By replaying production workload from your previous SQL Server or Oracle version on a new version test database, you can determine user and transaction load capacity and processing speed before you deploy to production. Using Benchmark Factory with Quest's Toad for Oracle, SQL Server, DB2 and SAP Solutions, you can also tune database code for optimal performance to increase the success of migrations.

ABOUT QUEST

Quest helps our customers reduce tedious administration tasks so they can focus on the innovation necessary for their businesses to grow. Quest® solutions are scalable, affordable and simple-to-use, and they deliver unmatched efficiency and productivity. Combined with Quest's invitation to the global community to be a part of its innovation, as well as our firm commitment to ensuring customer satisfaction, Quest will continue to accelerate the delivery of the most comprehensive solutions for Azure cloud management, SaaS, security, workforce mobility and data-driven insight.

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