**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®, Sybase®, 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 configurations to evaluate how applications perform when

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"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

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**Load validation**

**Application changes**
Benchmark Factory validates database code scalability to prevent bottlenecks in production.

**Platform changes**
Benchmark Factory performs workload replay to help determine the optimal platform or database configuration.
Benchmark Factory is a database benchmarking tool designed to simulate real database application workloads. It helps evaluate database scalability, test hardware/configurations, and determine system throughput.

### 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 (VU) 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 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 Dell’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 Dell’s Toad™ for Oracle, SQL Server and DB2, you can also tune database code for optimal performance to increase the success of migrations.

### About Dell Software

Dell Software helps customers unlock greater potential through the power of technology—delivering scalable, affordable, and simple-to-use solutions that simplify IT and mitigate risk. This software, when combined with Dell hardware and services, drives unmatched efficiency and productivity to accelerate business results. www.dellsoftware.com

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**System requirements**

**Repository**
- Oracle
- SQL Server
- MySQL
- SQLite®
- SAP® SQL Anywhere® (Adaptive Server Anywhere)

**Memory**
- 512 MB of RAM recommended

**Platform**
- 1.0 GHz x86 or x64 compatible CPU operating system

**Hard disk space**
- 120 MB

**Operating system**
- Microsoft XP Professional
- Microsoft® Vista®
- Microsoft Windows 7, 8, 8.1

**Database client/server versions**
- Oracle 9i, 9.2, 10g, 11g, and 12c
- SQL Azure (limited support)
- SAP® 12.5, 15, 15.5, 15.7, 16
- IBM® DB2® LUW 8.1.5 through 10.x
- IBM® DB2® for z/OS: 8.x through 10.x
- MySQL 4.5 and 5.x

Note: For a complete list of hardware and software requirements please refer to the Release Notes.