



## Benchmark Factory® Delivers Immediate Return on Investment to e-Rewards® Market Research by Validating the Scalability of New Hardware Implementation

Since inception, e-Rewards Market Research has delivered over 6 million completed surveys via the electronic communications channel and has supported thousands of survey studies. The company utilizes Oracle 10g, two E25K servers, and multi-tiered high-speed (Hitachi 9985) and slow-speed (Sun 6130) storage to manage its six terabytes of data. The E25's have been partitioned into 4 domains; two are used for e-Reward's Web-site and mission-critical applications, and the other two are utilized for data warehouse staging and reporting.

The company currently uses Data Guard for replication, Oracle Warehouse Builder to load summaries, as well as dimensional data models and Oracle Application Server for analytical and canned reports. The technical team consists of two DBAs, three data mart developers, four architects, and approximately 20 system developers that support approximately 200 internal users and 3.0 million online users.

### The Challenge

Faced with moving from old hardware to new enterprise hardware, e-Rewards wanted to ensure a seamless conversion without an impact on the business. "We wanted to validate and test the design, installation and configuration of our new hardware infrastructure for a smooth transition to the new platform without experiencing performance issues that would result in system downtime," said Eric Herfield, Vice President and Chief Technical Architect, e-Rewards.

The technical team at e-Rewards wanted to validate the performance of the company's current applications running on its new hardware configuration prior to production deployment. "In moving from a three-node clustered environment to a highly-scalable enterprise platform that would grow our business for the next several years, we wanted to ensure maximum performance from Oracle and other business-critical applications in the new environment," said George Nemer, Vice President of Infrastructure and Senior Infrastructure Architect at e-Rewards.

### The Quest Solution

e-Rewards considered utilizing scripts, a benchmark product called Swing Bench and Java solutions to perform testing. But, after searching for a tool to meet their benchmarking requirements, the e-Rewards team consulted Mike Ault of Bursleson Consulting, now Quest Software's Oracle domain expert, who recommended and endorsed Benchmark Factory.

"Benchmark Factory allows us to perform stress tests and run industry standard benchmarks so we can validate that our new hardware configuration is processing transactions at a faster rate than with the old system," said Herfield. "With Benchmark Factory, we are assured that our Oracle/database and hardware/SAN are all configured correctly to perform at optimum levels."

The company's infrastructure team used Benchmark Factory to perform tests via TPC-C and TPC-H standard benchmarks and production workload replay. Then, e-Rewards compared the performance and scalability of the old configuration to that of the new configuration.

Benchmark Factory identified several critical configuration issues that would have overloaded the new system and crashed the servers. "After applying several patches, we ran Benchmark Factory again and achieved great success," said Herfield. "Thanks to Benchmark Factory, we discovered a problem with the memory module we had planned to implement. We were then able to reconfigure our system without it. If we had not used Benchmark Factory, we would have deployed the memory module into production, and the system would have crashed and compromised our business."

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— Eric Herfield  
Vice President and Chief Technical Architect  
e-Rewards Market Research



### Overview

#### Headquarters

Dallas, Texas

#### Critical Needs

- Solution to seamlessly transition from old hardware to new enterprise hardware without experiencing downtime
- Product for performance and scalability load testing

#### Solution

Benchmark Factory

#### Results

- Ensured Oracle/database and hardware/SAN were configured properly to perform at optimum levels
- Identified and resolved critical configuration issues to ensure 24x7 system availability without adverse impact to business
- Increased concurrent user sessions from 150 to 3,000 due to hardware upgrade

## The Bottom Line

After implementing Benchmark Factory, the number of concurrent sessions, e-Reward's new system could withstand increased significantly from 150 to 3,000.

"As a 24x7 business, preventing system downtime is mandatory," said David Sink, Business Intelligence Architect, e-Rewards. "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."

"We cannot afford to shut down our system for a planned outage, let alone an unplanned one," added Herfield. "If our system is unavailable, we cannot meet our current contractual obligations and we are unable to conduct business. Downtime means a loss in revenue."

When rolling out new systems in the future, e-Rewards plans to use Benchmark Factory as a best practice to validate database scalability prior to production deployment. In conjunction with Benchmark Factory, e-Rewards also utilizes the Toad® for Oracle DBA module to simplify day-to-day database management, including comparing and synchronizing database schemas.

## About e-Rewards Market Research

eRewards, Inc., headquartered in Dallas, TX, was launched in 2000 as the first "by-invitation-only" research panel to serve the market research industry. With over 3 million panel members, the e Rewards opinion panels provide high quality respondents—enabling researchers to reach and engage targeted consumers and business decision makers. Today, the company provides global online market research services to more than 80 percent of the top 50 U.S. market research firms and over half of the top 25 global research firms. For more information visit <http://www.e-rewards.com/researchers>.

## About Quest Software, Inc.

Quest Software, Inc. delivers innovative products that help organizations get more performance and productivity from their applications, databases and Windows infrastructure. Through a deep expertise in IT operations and a continued focus on what works best, Quest helps more than 50,000 customers worldwide meet higher expectations for enterprise IT. Quest Software can be found in offices around the globe and at [www.quest.com](http://www.quest.com).

Quest Software Incorporated. • To learn more about our solutions, contact your local sales representative or visit [www.quest.com](http://www.quest.com).

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