LOAD TESTING ACCELERATOR FOR ORACLE DATABASE

**Oracle Enterprise Manager** is Oracle’s integrated enterprise IT management product line, and provides the industry’s first complete cloud lifecycle management solution. Oracle Enterprise Manager’s Business-Driven IT Management capabilities allow you to quickly set up, manage and support enterprise clouds and traditional Oracle IT environments from applications to disk. Enterprise Manager allows customers to achieve best service levels for traditional and cloud applications through management from a business perspective including for Oracle Fusion Applications, provide maximum return on IT management investment through the best solutions for intelligent management of the Oracle stack and engineered systems and gain unmatched customer support experience through real-time integration of Oracle’s knowledgebase with each customer environment.

**Quality Management**

Realistic and efficient testing has become more and more difficult in today’s fast-paced IT environments, where agile development methodologies, SOA, cloud and other disruptive technologies compress deployment timeframes from months to days. In addition, the emerging consensus around the importance of DevOps underscores the desirability of testing methodologies that are tightly linked to IT operations best practices. Oracle understands this and has engineered market-leading Quality Management solutions in Oracle Enterprise Manager that provide realistic, production-level synthetic workloads, transportable real user workloads, deep instrumentation and the most efficient automation available for testing Oracle packaged and custom applications.

The Oracle Application Testing Suite Load Testing Accelerator for Oracle Database allows users to test the performance of their Oracle Database using synthetic test scripts. It is also integrated with Oracle Real Application Testing to enable testing with real production workloads. Users can create database test scripts in Application Testing Suite manually or automatically generate them by importing workload captures from Real Application Testing’s Database Replay component. These scripts can then be run in Oracle Load Testing with hundreds or thousands of concurrent virtual users to scale up load and analyze database performance.

The Load Testing Accelerator for Oracle Database is a component of Oracle Application Testing Suite, the centerpiece of the Oracle’s solution for comprehensive testing of packaged, Web and service oriented architecture-based applications.

**Ensuring Database Performance**

Ensuring the performance of your database is critical if you want to maintain good application performance and a positive end-user experience. However, most load and performance testing tools focus on testing the application end-to-end and make it difficult to isolate specific database performance issues or test just the database tier in isolation. Available database testing tools are hard to use and don’t allow you to generate real workloads that accurately reflect production database usage. Oracle’s Real Application Testing and Application Testing Suite’s Load Testing Accelerator for Oracle Database provide the most complete solution for ensuring database performance. Real Application Testing’s Database Replay
allows you to capture and replay real application workloads to test the performance of your Oracle Database. The ATS Load Testing Accelerator for Oracle Database allows you to create highly customized synthetic database test scripts. These scripts can be automatically generated from Database Replay workload capture files and then be used for targeted synthetic load tests against the database or to scale-up the database load for capacity planning. This unique combination allows you to analyze and address database performance issues in the test phase for new applications or upgrades, prior to deploying to production.

**Load Testing Accelerator for Oracle Database**

The Load Testing Accelerator for Oracle Database extends Oracle Load Testing to enable automated load and performance testing of Oracle Database using synthetic test scripts. With Oracle Load Testing you can simulate hundreds or thousands of virtual users executing database transactions simultaneously to measure the effect of the load on database performance.

Users create their database load test scripts in Oracle Functional Testing’s OpenScript integrated scripting platform. OpenScript allows you to create these scripts manually or by automatically importing database transactions from a database capture files for an existing database. The imported SQL queries and stored procedures then become the commands that drive your test script.

OpenScript is integrated with Oracle’s Real Application Testing. This takes database testing even further by enabling you to construct a highly customized testing workload based on real production SQL and PL/SQL and use that for scale up testing and smart capacity planning. You can import a Database Replay capture file from your production database to automatically generate your test script. This will import all of the SQL statements and parameters that are used to drive your script. The scripts can then be parameterized to drive the SQL inputs from an external data source. The scripts can also be extended in OpenScript through either the GUI or Java Code View to further customize your database workload. The scripts can then be configured to run in Oracle Load Testing against any number of concurrent virtual users.

Figure 1. Oracle Functional Testing’s OpenScript allows you to create synthetic database test scripts to test your Oracle Database. Database transactions can be automatically imported from Database Replay workload captures from your production database.
Oracle Load Testing provides a Web-based console that allows you to configure and run one or multiple scripts across thousands of virtual users to analyze database performance. Users specify which scripts they want to run, how many virtual users to execute for each script and how quickly to ramp up the load – among other parameters. During the load test, Oracle Load Testing provides real time results to measure database transaction response times as well as the performance of the underlying database infrastructure through its integrated ServerStats infrastructure monitoring module. Load test session results for all tests are then stored for historical reporting and analysis.

Figure 2. Oracle Load Testing allows you to scale up the test scripts against any number of concurrent virtual users to analyze database performance under load.

Oracle Application Testing Suite’s Load Testing Accelerator for Oracle Database combined with Real Application Testing provides a comprehensive testing solution for Oracle Database. It is part of a comprehensive, integrated solution for automated functional and regression testing, load testing and test process management for applications and Oracle Databases. With it you can ensure performance of your mission critical databases and provide a positive user experience for your application users.

Contact Us

For more information about LOAD TESTING ACCELERATOR FOR ORACLE DATABASE, visit oracle.com or call +1.800.ORACLE1 to speak to an Oracle representative.
Hardware and Software, Engineered to Work Together