



QuerySurge™
Ensuring Data Warehouse Quality

2011 Enterprise Edition

QuerySurge™ is enterprise software to automate your data warehouse testing cycle and validate the integrity of your organization's data.

Make critical business decisions with confidence.

How do you know if your data is accurate and can meet quality standards? Do your manual sampling efforts provide enough coverage to represent all data in your system? How do you decrease the risk of loading incorrect data?

Data warehousing is the cornerstone of your organization's information infrastructure, and the data within is one of your most important business assets. It is vital that any issues surrounding data quality be addressed in order for the data to add value to your organization. You should always be confident that the data obtained from your business intelligence system can support critical business decisions.

The solution to ensuring data integrity is simple in concept - compare all of the data in the source system(s) with all of the data loaded into the data warehouse and data mart(s). This solution, however, is often impossible to achieve manually due to the sheer volume of existing data.

To protect your enterprise applications from the risk of poor data quality, you need to regularly manage, maintain, and monitor all data in your data warehouse. This cannot be done through manual testing alone. QuerySurge™ is the only data integrity software that automates, discovers, monitors and governs data to meet the intense demands of your organization.

QuerySurge™ helps you:

- Automate all data warehouse testing cycle activities
- Verify data across all points during the ETL process
- Validate all data, not just a subset or sample
- Pinpoint mismatched and missing data
- Obtain an accurate view of your data warehouse, reducing risk and avoiding future issues
- Profile the performance of your data warehouse

How QuerySurge™ works

QuerySurge™ is built around a central repository that stores queries, allowing testing of millions of rows of data during a run. Once the repository is populated with queries that are customized for each source system and each business rule, volume data testing can begin. The tool framework is fairly simple – it pulls queries from the repository and executes them against the source systems and the data warehouse.

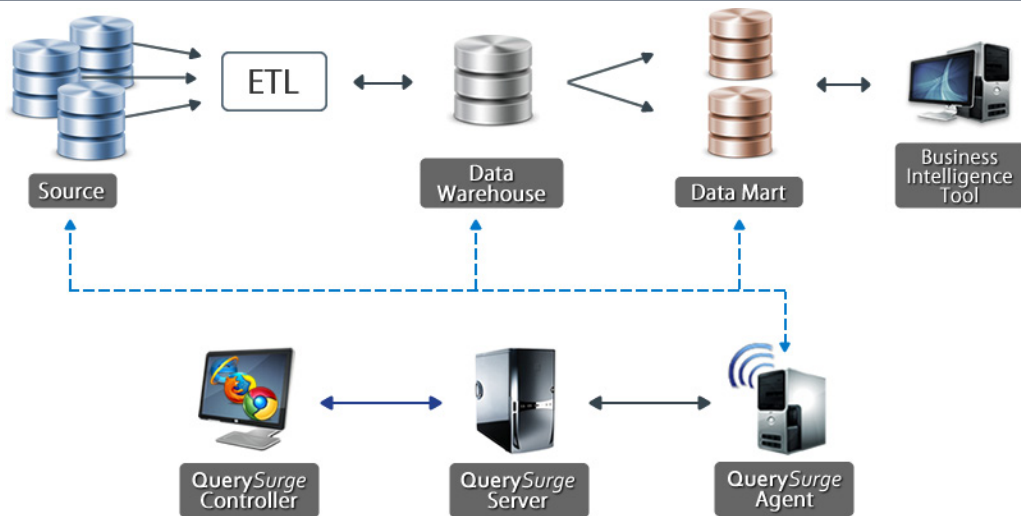
The queries are written to return the data in a common format, regardless of differences in database structure. The tool then compares the results of these queries to find discrepancies in the data within the different systems.

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Highlights

- Reduce the duration of the data warehouse test cycle with automation and scheduling of tasks
 - Improve the quality and usability of your data warehouse through validation at every point of the ETL process
 - Mitigate risk for your organization by testing upwards of 100% of all data in the system
 - Comply with data integrity standards and regulations with a documented audit trail
 - Provide management with the business intelligence they need by generating high-level and detailed reports
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Illustration: QuerySurge™ interacting with a data warehouse architecture.



The queries are written based on business requirements for the extraction and transformation of data from each of the source systems to the data warehouse. Each pair of queries creates a test case for a particular business requirement. QuerySurge™ also supports reusable query snippets, which may then be used across a range of related tests. This allows for a lower maintenance cost, as a subset of the query library can be modified by slightly changing the underlying query snippet.

The tool utilizes a server that connects to agents on remote clients. The software quality engineer connects through a web-based client to modify, execute and view results of the tests. This permits distribution of large query libraries over several clients, as tests can be run concurrently on several clients (24 x 7) in order to reduce the total required execution time. The decrease in testing cycle time, in turn, can reduce the time between builds in the development cycle, enabling more cycles and builds prior to release.

Measurable benefits

This level of testing can help ensure that data meets the business requirements specified, building confidence in the accuracy of the data contained in the data warehouse. The measured level of reliability provided by data integrity testing underscores the value in the investment.

QuerySurge™ offers these benefits:

- Drastically improve the speed of your test cycle, saving time and money
- Validate upwards of 100% of all data
- Use the software for data migration verification, and for query performance profiling
- Have an audit trail for data integrity standards and regulatory requirements
- Mitigate risk and meet business requirements
- Profile the performance of the data warehouse

The return on the investment comes from the ability to measure and track data warehouse data integrity over time with a low per-cycle overhead.

Your organization will know the measured quality of its data at any time, and can proceed with confidence in its data warehousing operations.

Key features

QuerySurge™ was developed to streamline the data quality test cycle by giving your quality assurance team intuitive tools and options.



Scheduling

Organize your tests into test suites to ensure coverage across the entire ETL process.



Administration

Create and manage user profiles, database connections, agent configuration, and data archiving options.



Design

Build libraries of test query pairs and reusable query snippets.



Reporting

Generate summary and detail reports on scenario results with a complete audit trail of test modifications. View and export source and target data comparisons



Run Dashboard

View the real-time status of scenarios on the Run Dashboard, and drill down into test details and data failures



Web-based

Access QuerySurge™ through a lightweight, customizable web interface. Simplify deployment across your project teams.