

A professional woman with blonde hair, wearing a beige blazer over a striped shirt, is seated at a conference table. She is holding a white document and looking towards the camera with a slight smile. In the background, two other people are seated at the table, working on documents. The setting appears to be a modern office or meeting room with large windows.

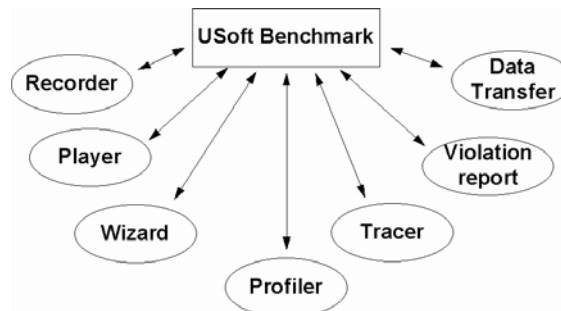
USoft Product Information
USoft BenchMark

USoft BenchMark Application Testing, Tuning & Data Validation

Introducing USoft BenchMark

USoft Benchmark has been developed in view of the fundamental importance of the problem-free operation of an application created using the USoft technology platform. Undetected errors, unintended deviations from the defined business model or a bad performance can result in tremendous costs of quality.

So where USoft Definer focuses on building the application itself, USoft Benchmark assists in ensuring that this application performs as it is supposed to do. This is especially important after a change cycle has occurred.



Minimize the risk of human failure

USoft BenchMark has been designed to minimize the risk of human failure. Changes in your application's data model, business logic, or screen design will no longer pass unnoticed. Each aspect of your application's functionality can be automatically tested for compliance with the specifications.

BenchMark quality and efficiency

USoft's test facility enables you to measure both the quality (does it do what it is supposed to do?) and efficiency (does it make optimal use of the available resources?) of the application under development. You can measure the progress after each test run.

Optimize server-client capacity

The test facility's built-in Profiler not only measures actual performance, but also provides hints for optimizing your application's server-client capacities. In addition, its tracing facility enables you to trace the SQL statements and manipulations that are fired during a test, as well as tracing method calls that are executed while you are interacting with a USoft application.

Maximize long-term productivity

USoft BenchMark's reusable test procedures ensure long-term productivity of your test efforts. (Once a test has been recorded, you can play it back at any time.) As the tests and their results are stored and managed in a RDBMS, they stay available over time, even when the application has gone from development to production status, or if the original developers and testers have left.

Improve teamwork of development staff

USoft BenchMark greatly improves the teamwork of the development staff. Instead of having to rely on written or spoken problem reports, which are often difficult to reproduce, developers and testers can now communicate using “captured” real-life situations.

Validate business logic

Following the USoft approach to iterative prototyping, USoft BenchMark is able to validate your implementation of the business logic involved in a fully functional application at any stage. All you have to do is to incorporate any new procedures into existing tests, and then run these again.

Streamline systems acceptance

Using USoft BenchMark to thoroughly test your application, end-users no longer have to participate in technical system tests (does it work at all?). Instead, they can concentrate on functionality (does it solve our need for information?) and performance.

USoft Benchmark capabilities include:

- Test and debug facilities during the development process.
- Verification that the newly developed version still gives the same results as the previous version.
- Configuration tuning of the database access for optimal performance.
- Validate the consistency and integrity of the database, also with respect to adherence to the defined business model.

Features*Automated Testing*

- Record a test sequence of key strokes and/or mouse operations.
- Replay a test sequence.
- Create a test note.
- Define step and procedure checks.
- Importing/exporting default test data to/from the database.
- Store, retrieve and edit a test.
- Analyze the structure of a test.
- (Re)use (parts of) existing tests to build new ones.
- Log and compare test results.
- Analyze SQL database calls by type.
- Generate a default test template using the test wizard.

Development test support

- Debugs step-by-step, in slow motion or full speed.
- Traces and logs conceptual, internal and external database calls.

Performance tuning and profiling

- Index hints.
- Measure and analyze execution time profiles.
- Benchmark USoft-supported databases.

Validation of business logic

- Perform consistency and integrity checks on database.
- Verify databases with respect to defined business rules.

Benefits

- Minimizes the risk of human failure - each aspect of the application's functionality can be tested automatically for compliance with the specifications.
- Benchmarks quality and functionality of application.
- Optimizes system performance and capacity.
- Maximizes long-term productivity (tests and their results are stored in a RDBMS; they are available over time).
- Facilitates development.
- Improves teamwork of development staff.
- Validates business logic.
- Streamlines systems acceptance.