

TESSY automates the whole unit test cycle including regression testing for your embedded software in C/C++ on different target systems. As an easy-to-install and easy to operate testing tool TESSY guides you through the unit test workflow from the project setup through the test design and execution to the result analysis and reporting. TESSY takes additionally care of the complete test organization as well as the test management, including requirements, coverage measurement, and traceability.

TESSY Key features for unit and integration testing

- Intuitive test design and automated workflows
- Manage, link and trace requirements
- Edit test data within spread sheets and user code
- Management of software variants
- Define time-based component testing scenarios
- Test execution on hosts, simulators and hardware
- Plot test results graphically
- Analyze code coverage in flow chart graphics
- Generate customizable reports in several formats
- Command line scripting for continuous integration
- Integrated Classification Tree Editor (CTE)

The new version TESSY 4.0 provides a wide range of new features, most notably a full support for C++, an innovative software variant management system and UUIDs (universally unique identifiers) for all TESSY objects.

The C++ support was entirely revised for a comprehensive C++ support. Within the user-friendly Test Data Editor (TDE) constructor methods and initialization of classes can easily be selected for tests. Stubbing of external and internal methods as well as testing of methods that use standard libraries (Standard Template Library, STL) is also fully supported.

A new innovation in TESSY 4.0 is the management of software variants for easy and straightforward testing of software variants. The challenge in testing software variants is that every variant needs to be tested completely. The new Variant Management of TESSY is using a method to reuse and inherit variant tests. By defining base tests that can be inherited to variant tests working on a redundant level can be avoided. For every application change tests need to be maintained in one place only. Derived modules allow creating hierarchical variant trees to quickly and automatically test base and derived variants using selected test cases. The tests within a derived module can be added, deleted, copied and customized intuitively. Using the software variant management allows product-specific code of a product series with different variations to be analyzed and tested individually and efficiently.

TESSY 4 management of software variants supports the following features:

- Definition of a variant tree
- Definition of abstract variants
- Inheritance of test cases and all test data
- Change of inherited test data
- Deleting/hiding of inherited test cases
- Adding additional test cases
- Coloring of inherited or overwritten test data
- Different configuration for each variants (e.g. compiler, debugger or target)
- Support of classification tree editor (CTE)

As one of the first unit test tools TESSY is today's leading solution for testing of embedded software. Designed to support development and testing according to standards, TESSY is well established to be used for high-quality products and safety-critical applications. Please visit us at our booth 4-434 in hall 4 and learn more about our comprehensive test solutions and services.