Validation Tool
Automate validation and testing

The straton software validation tool is designed for OEMs that want to automate the validation of the straton instruction set, create test applications and automate non-regression testing in order to identify changes that impact behavior.

The validation can be done in the integrated simulation tool in the straton Editor or connected through TCP/IP or serial line with the real hardware platform.

AUTOMATED TESTING OF FBS

For each test program, the validation tool automatically:

▸ Creates a new project using the straton database
▸ Declares variables, programs and fills programs content
▸ Compiles using the straton compiler
▸ Connects to the runtime and downloads the project using the straton networking interface
▸ Forces values and checks results using the straton networking interface

The test stops after the first error. The tool provides a complete listing of:

▸ All test programs in ST format
▸ All test cases and results

The tool can be run with various compiling options. Some tests can be unchecked if some data types/features are not implemented in the runtime.

TEST TOOL

Running test projects enables automatic functional testing at the application level.

The tool automatically runs a set of test projects prepared with the straton Editor. Each test project contains logic to be tested plus some extra programs to check the result, written with IEC languages. Input for the test tool is simply a collection of straton projects exported in XML form. This tool is particularly efficient for non-regression tests.

OEMs can prepare their own test projects and add them to the collection. Such projects may include testing of OEM-specific features and hardware.

The validation tools generate a report for any test project, that can be used for checking non regression for real life use cases.

FAST FACTS

▸ Automatic testing of applications
▸ More than 300 individual tests
▸ Global test projects
▸ Validation of a new IEC61131-3 device