ASCET Testing with TPT

TPT offers fully automated support for testing ASCET models. Every ASCET model can be automatically tested with TPT. The test cases are created by means of TPT test models. The integration feature of TPT with ASCET ensures an efficient execution and an effective test process.

Important features

- Full support of ASCET physical experiment models
- Full support of ASCET implementation models
- Automatic interface analysis by means of A2L and DCM support
- Automatic generation of test-frame projects
- Bi-directional exchange of parameters
- Automatic test execution based on PC-target
- TPT remote-controls ASCET
- Test execution in unattended batch mode
- Comparison of test results through Back-to-Back-Analysis

Model and interface analysis

In order to make the test models simple to create, TPT can extract the interface information from every ASCET model using automatically generated A2L and DCM interface files. The TPT interfaces can also be manually created, adapted or corrected at any time, if necessary.

Test-frame generation

TPT manages the test execution for ASCET models by generating test frame projects containing a copy of the original ASCET model and a special TPT test driver module. The creation of the TPT test-frame project is completely automated.

Test execution

All aspects of test execution management are handled by TPT. This means that TPT starts ASCET and loads the test-frame project necessary for test execution. TPT exchanges parameter binding with ASCET, which can be adjusted for each and every test case. TPT can execute test cases in unattended batch mode and handles the logging of all test-relevant signals. This works both, for physical experiments as well as for implementation models.