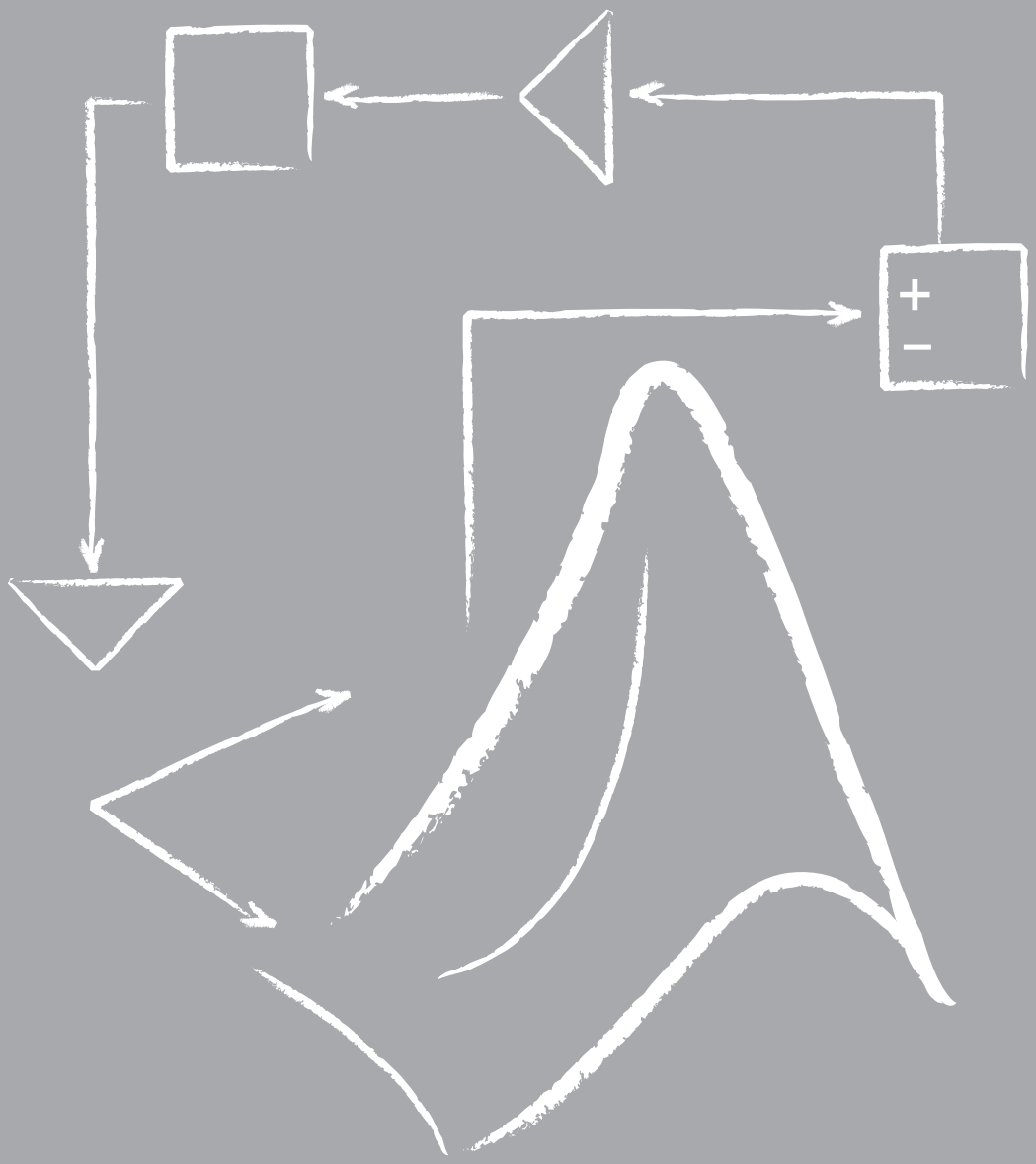
SIMULINK TESTING
with TPT



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MATLAB/ Simulink Testing with TPT

TPT offers unique and all-encompassing support for testing MATLAB/Simulink/Stateflow- and TargetLink models. The strengths of both systems can be used because of the perfectly tuned interface between TPT and MATLAB/Simulink. Functional models are created normally in MATLAB/Simulink, Stateflow and TargetLink. Then the associated test models are created in TPT. The integration feature of TPT with MATLAB/Simulink ensures an efficient execution and an effective test process.

Important features

- Full support of MATLAB/Simulink
- Full support of TargetLink
- Automatic interface analysis
- Automatic generation of the test-frame models
- Bi-directional exchange of parameters
- Reusability of tests between MiL, SiL, PiL and HiL
- Comparison of test results through Back-to-Back-Analysis
- Flexible configuration options by way of M-script support

Model analysis and interface extraction

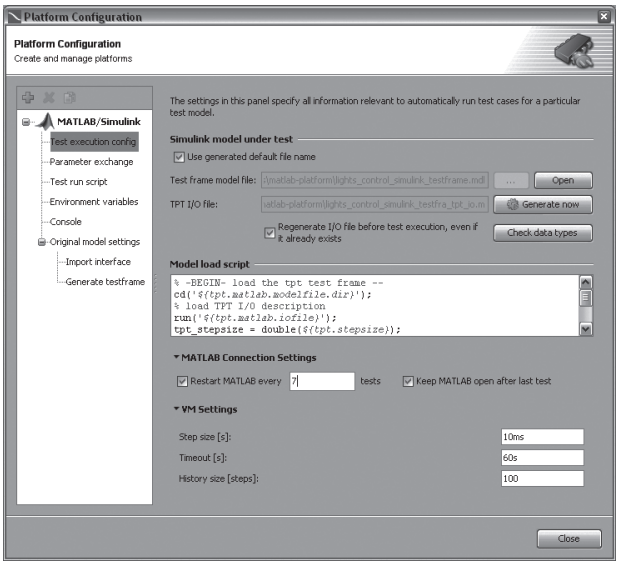
In order to make the test models simple to create and easy to reuse, TPT extracts the interface information for the functional models and inserts it into the test model. TPT takes the subsystem model to be tested, automatically handles the interfacing and analysis of signals, the vectors, busses and multiplexers. The TPT interfaces can also be manually adapted or corrected if necessary.

Test-frame generation

TPT requires a test-frame model for test execution which contains a copy of the complete sub system behavior and a special TPT execution engine. The creation of the TPT test-frame model is completely automatic, if desired.

Test execution

All aspects of test execution management are handled by TPT. Tests can be executed in unattended batch mode. This means that TPT remote controls MATLAB/ Simulink and manages the data exchange. Ordinary signals and parameter exchange is supported. In conjunction with TargetLink also internal signals within the model can be measured and assessed after execution. If necessary, TPT can execute custom M-files in order to customize the MATLAB/Simulink environment.



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